SAMSUNG

DUAL BAND Mobile Cellular Phone

SGH-2200

SERVICE *Manual*

DUAL BAND Mobile Cellular Phone

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Samsung Electronics Co.,Ltd.
GH68-00540A
1999.7. Rev.1.0

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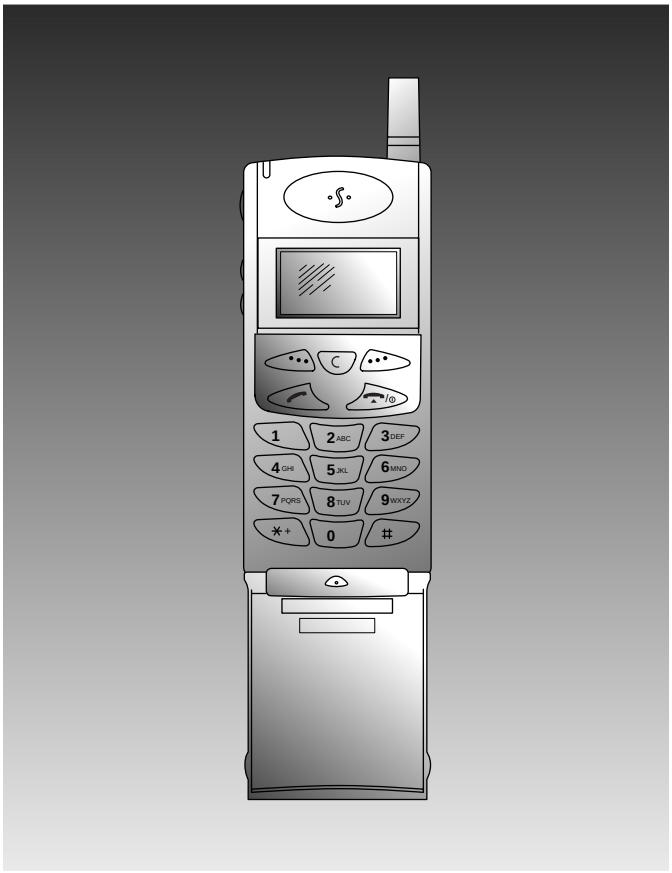

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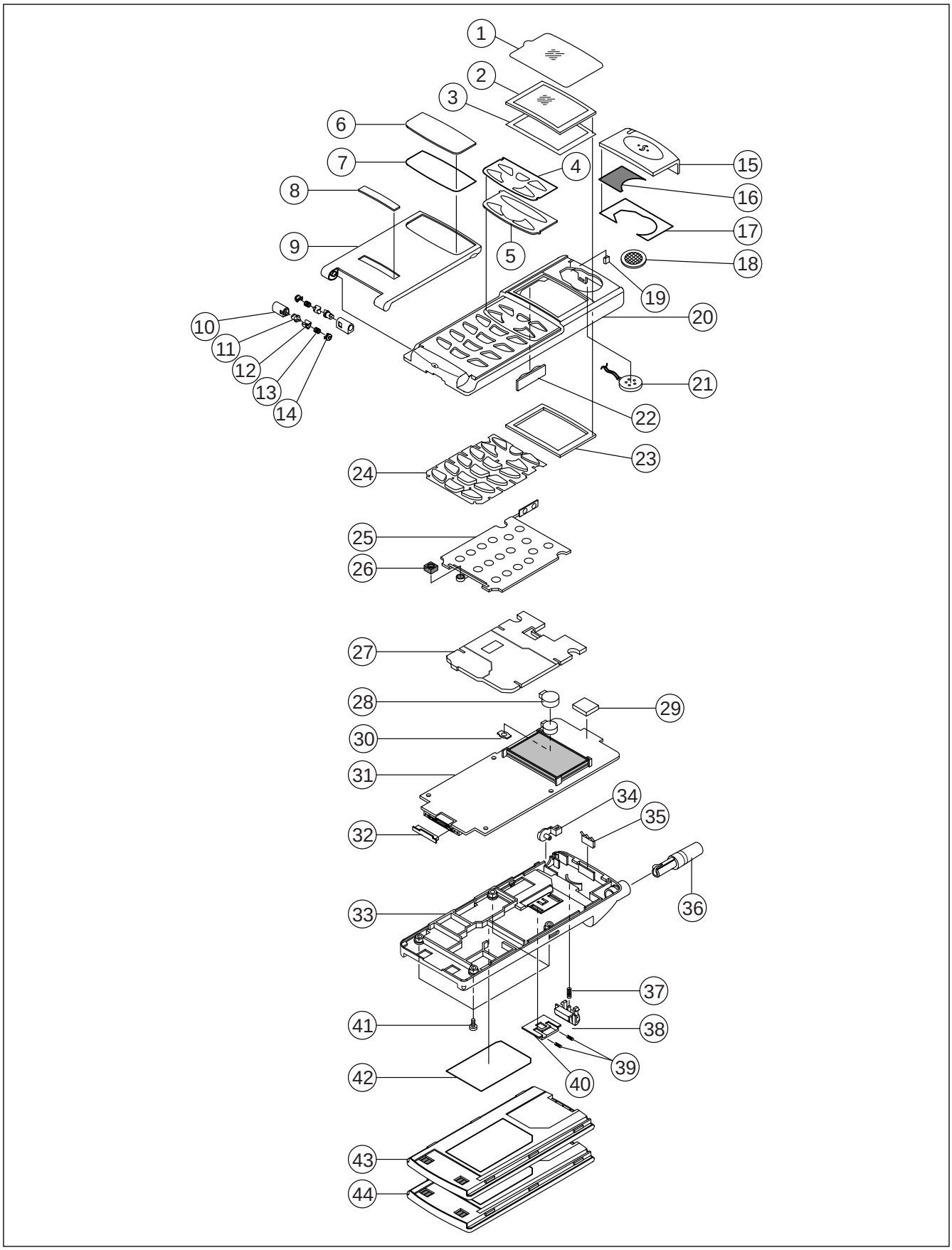
2-1 Main Exploded View

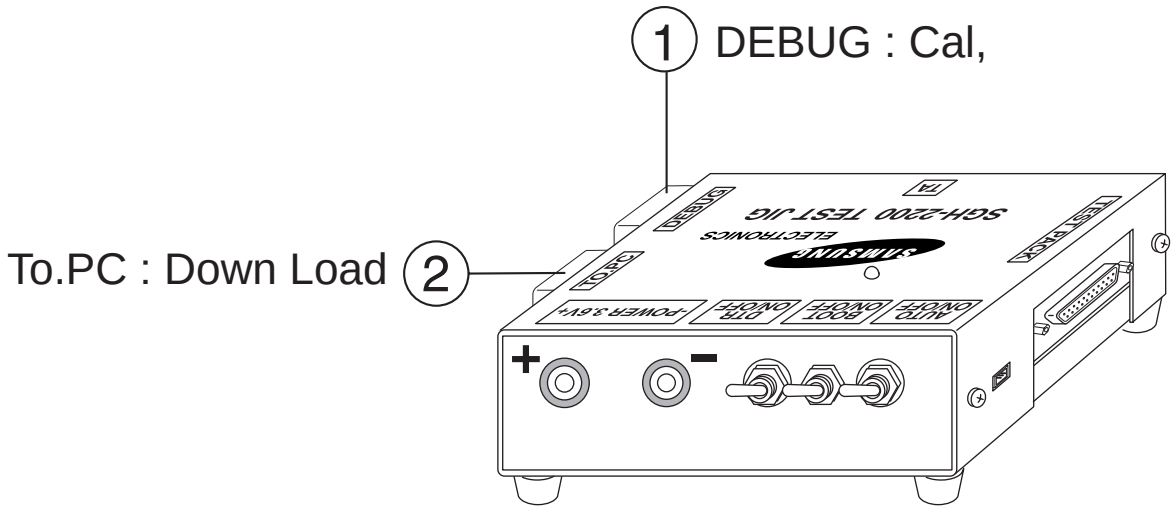


2-2 Main Parts List

NO	DESCRIPTION	SEC. CODE	Q'TY	REMARK
1	TAPE WINDOW BOHO	GH72-10001A	1	W
2	LCD WINDOW	GH72-00093A	1	W
3	WINDOW TAPE	GH74-00039A	1	W
4	DUMMY KEY	GH72-00108A	1	F
5	DUMMY KEY TAPE	GH74-00053A	1	F
6	DUMMY FLIP	GH72-00094A	1	FLIP
7	DUMMY FLIP TAPE	GH74-00038A	1	FLIP
8	LOGO BADGE	GH68-20008A	1	
9	FLIP COVER	GH68-20008A	1	FLIP
10	HINGE HOUSING	GH72-41293A	2	F
11	SHAFT HINGE	GH72-41554A	2	F
12	CAM HINGE	GH72-41055A	2	F
13	HINGE SPRING	GH70-10608A	2	F
14	HOUSING CAP	GH72-41056A	2	F
15	DUMMY FRONT	GH72-00084A	1	F
16	DUMMY MANFSA	GH74-00204A	1	F
17	DUMMY TAPE	GH74-00040A	1	F
18	SPEAKER MANGSA	GH74-00208A	1	
19	LED LENS	GH72-00082A	1	F
20	FRONT COVER	GH72-00083A	1	F
21	SPEAKER	GH39-00030A		1
22	VOLUME KEY	GH73-00025A	1	
23	LCD SPONGE	GH74-00041A	1	F
24	3X4 KEY	GH72-00095A	1	
25	KEY PCB	GH59-00041A	1	
26	MIC HOLDER	GH73-00026A	1	
27	SHIELD CAN	GH72-00089A	1	
28	BUZZER HOLDER	GH73-00024A	1	
29	SPONGE SPEAKER	GH74-00142A	1	
30	JACK-COVER	GH73-00116A	1	
31	MAIN PBA	GH92-00742A	1	
32	CONNECTOR COVER	GH73-40639A	1	
33	REAR COVER	GH72-00086A	1	R
34	EARPHONE COVER	GH73-00027A	1	
35	STRIP FINGER	GH71-10639A	1	R
36	ANTENA	GH42-00006A	1	
37	LOCKER SPRING	GH70-10516A	1	R
38	MAIN LOCKER	GH72-00087A	1	R
39	SIM SPRING	GH70-00006A	2	R
40	SIM COVER	GH72-00088A	1	R
41	SCREW M2X6	6001-001046A	4	
42	MAIN LABEL	GH68-00333A	1	
43	STD BATTERY (BTL1030MB)	GH43-10314A	1	
44	LONG BATTERY (BTL163DLB)	GH43-00089A	1	

W	WINDOW ASS'Y	GH97-00929A		
F	FRONT ASS'Y	GH97-00938A		
FLI	FLIP ASS'Y	GH97-00944A		
R	REAR ASS'Y	GH97-00935A		

2-3 Test Jig

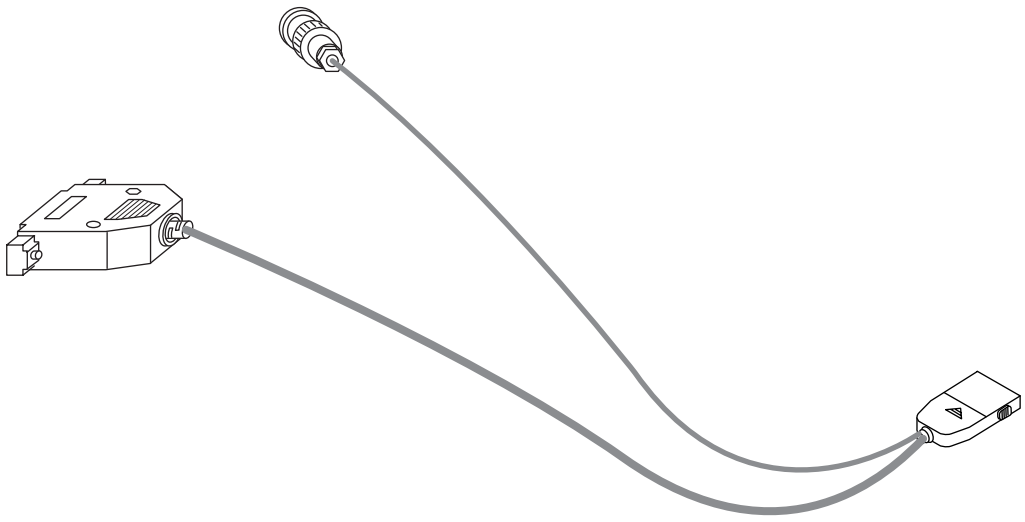


JIG

* Switch

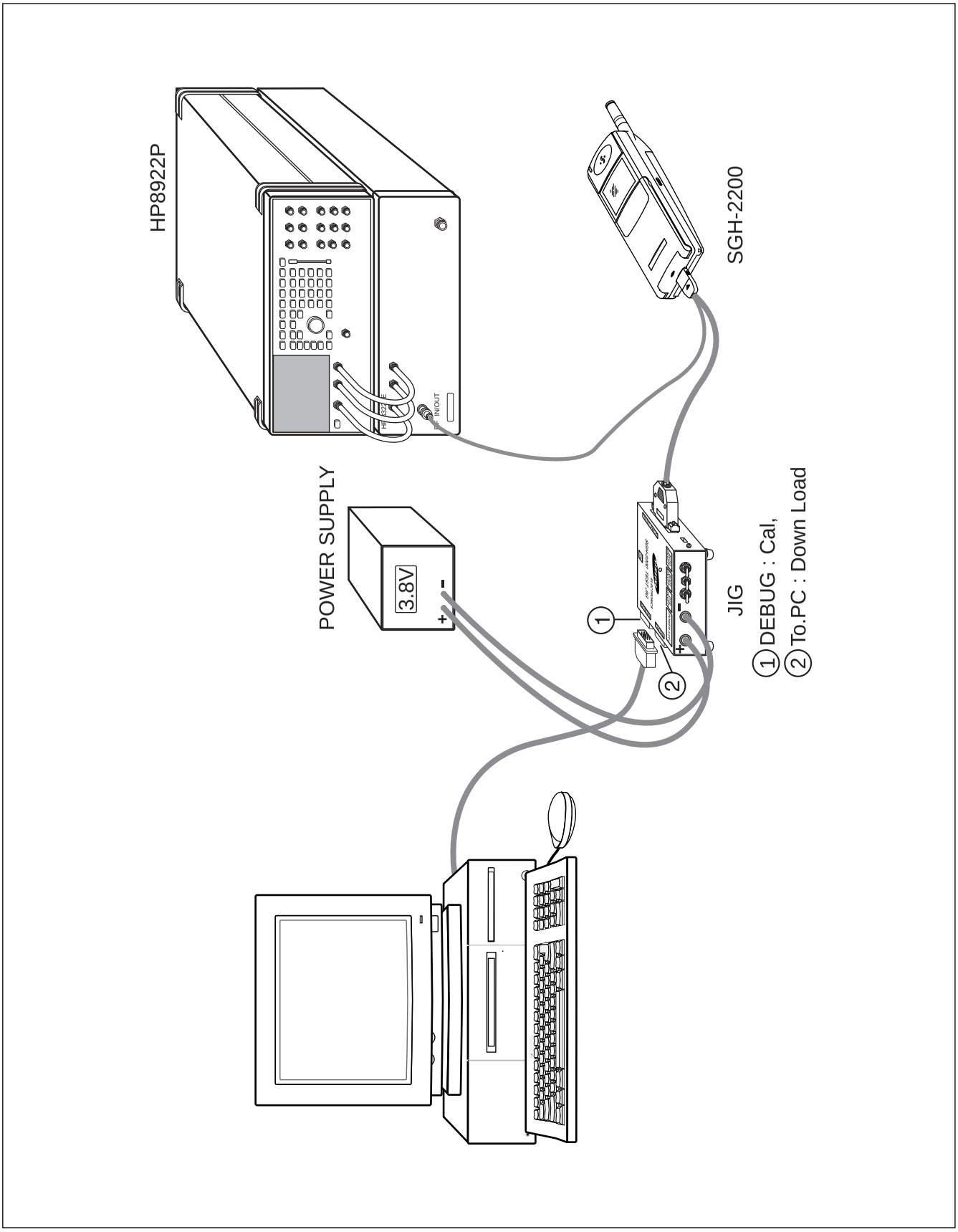
	DTR ON/OFF	BOOT ON/OFF	AUTO ON/OFF
Cal.	up	down	up
Down Load	up	up	up

2-4 RF Cabel

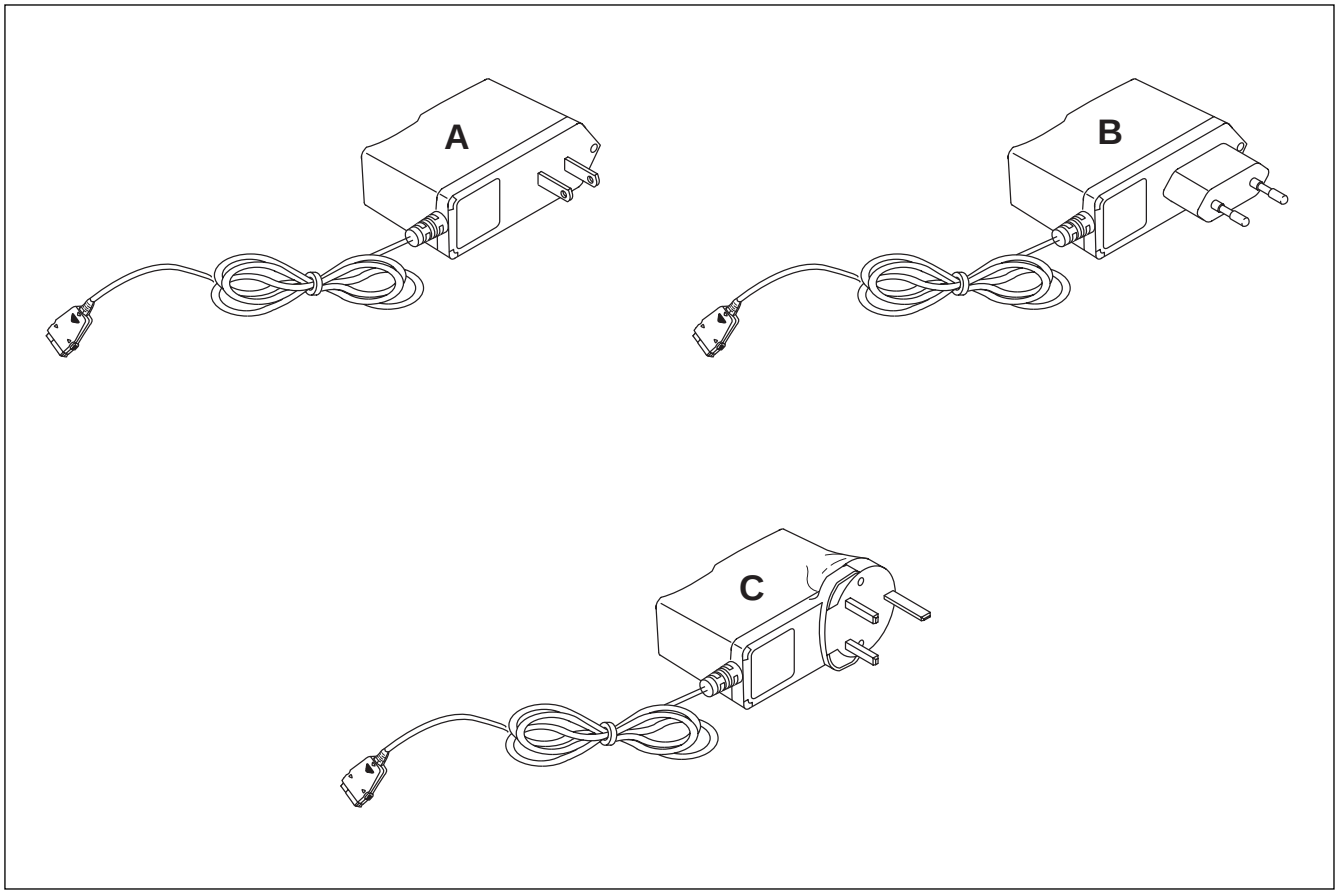


RF CABLE

2-5 Test Connection Method



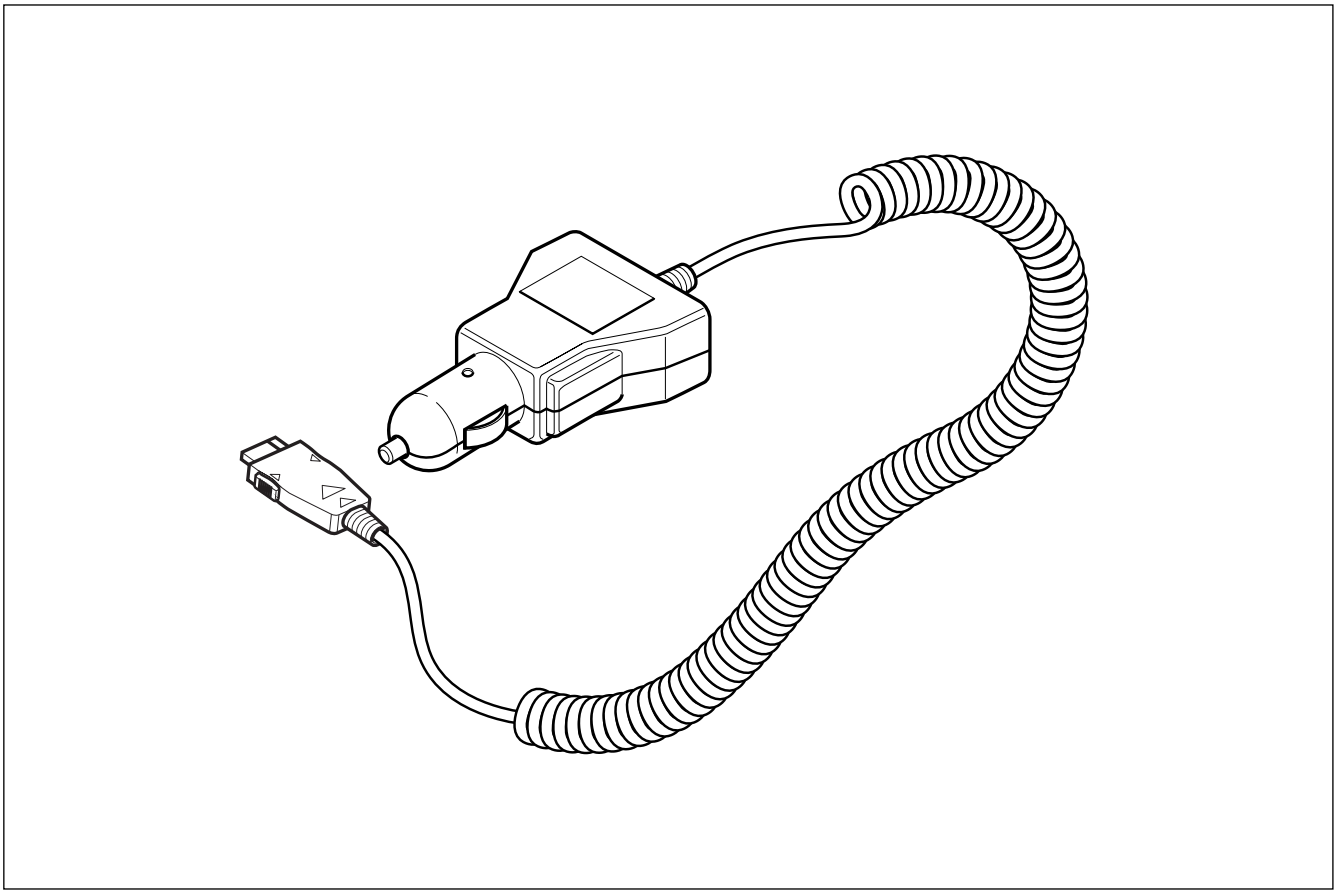
2-6 Travel Adaptor



2-7 Travel Adaptor Parts List

Type	SEC Code	Remark
A	GH44-30548A	CHINA
B	GH44-30549A	EUROPE
C	GH44-30547A	UNITED KINGDOM

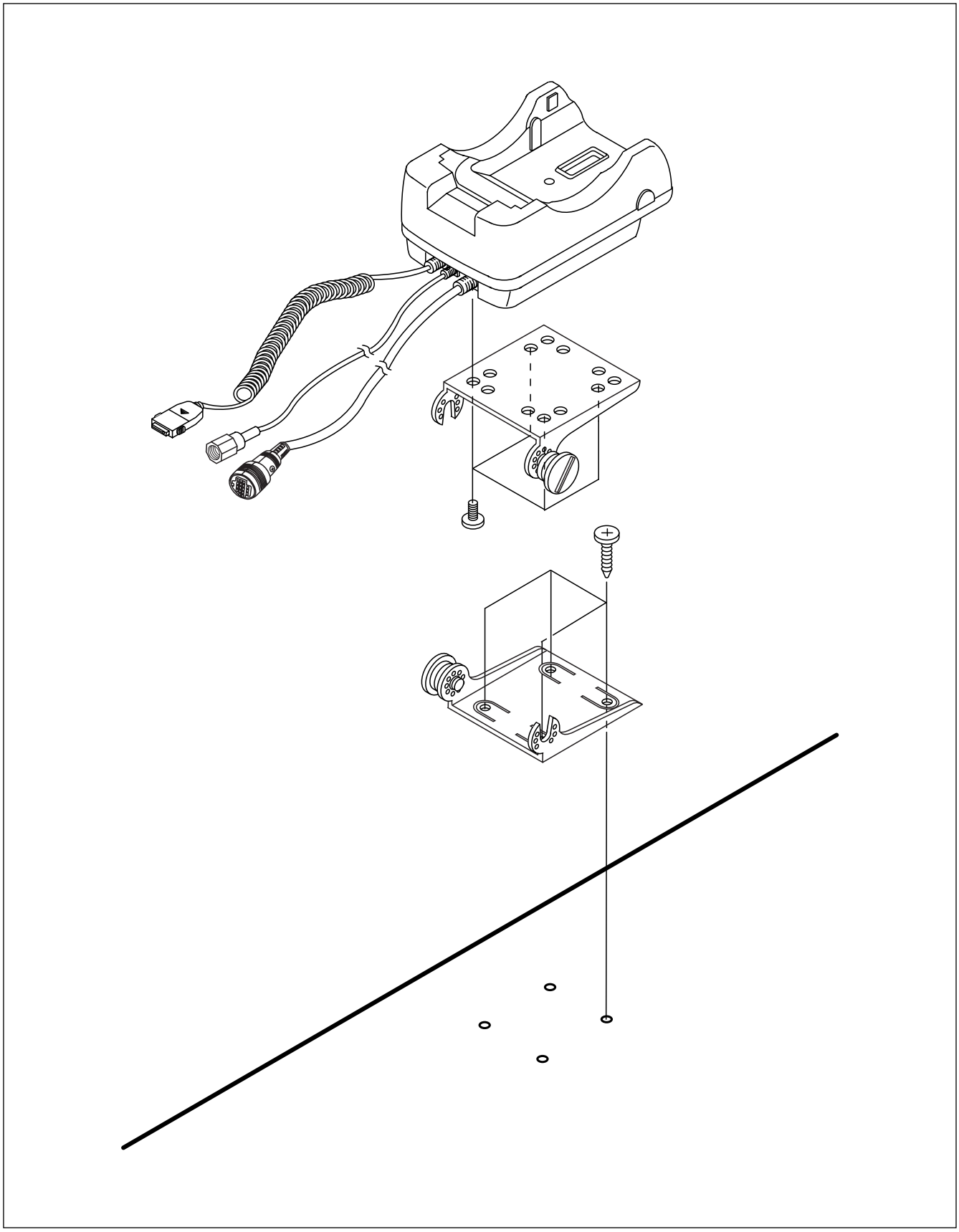
2-8 Ciger Light Adaptor



2-9 Ciger Light Adaptor Part List

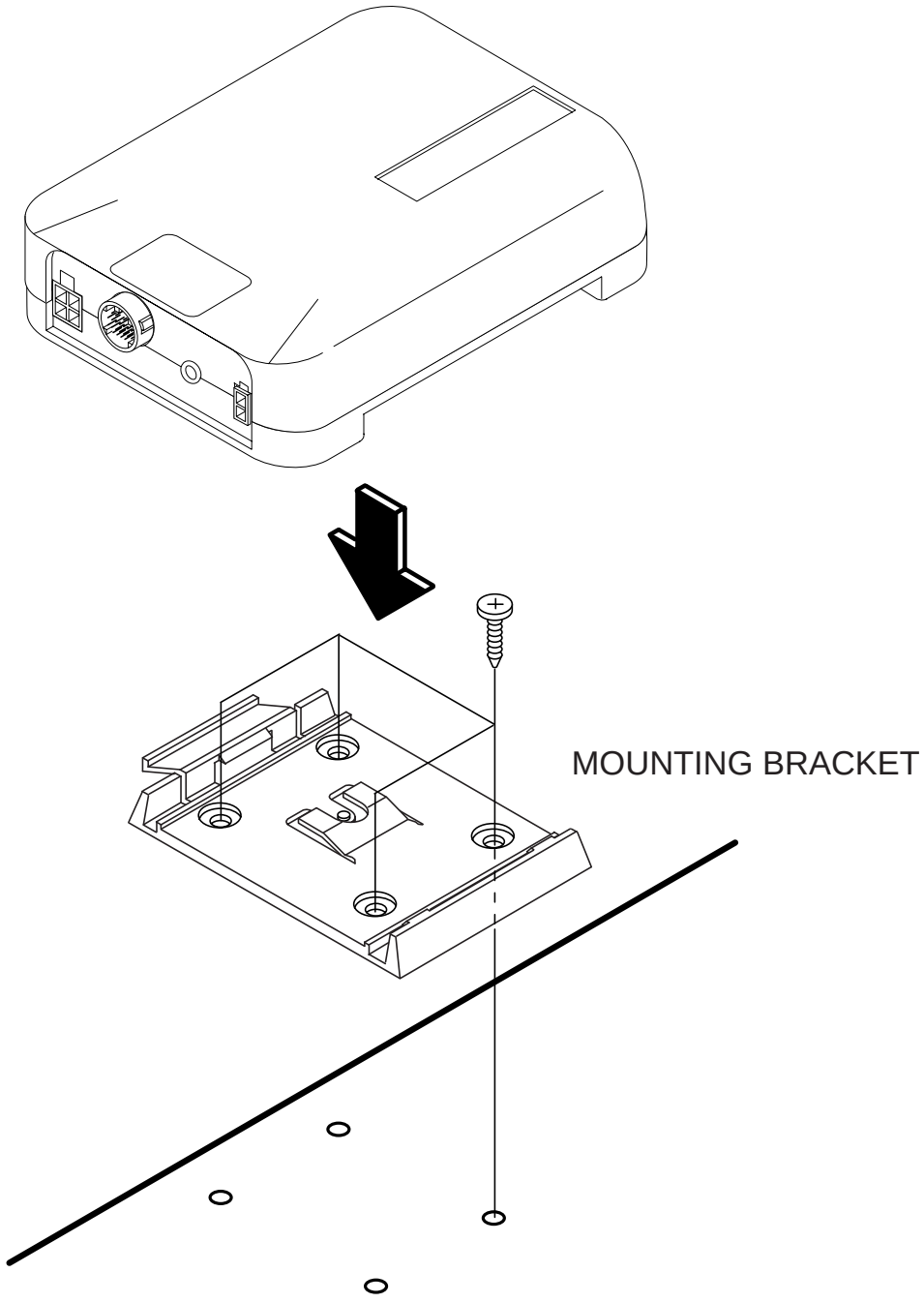
Description	SEC Code	Remark
Ciger Light Adaptor COde	GH44-30546A	BLACK

2-10 Hands Free Kit Diagram



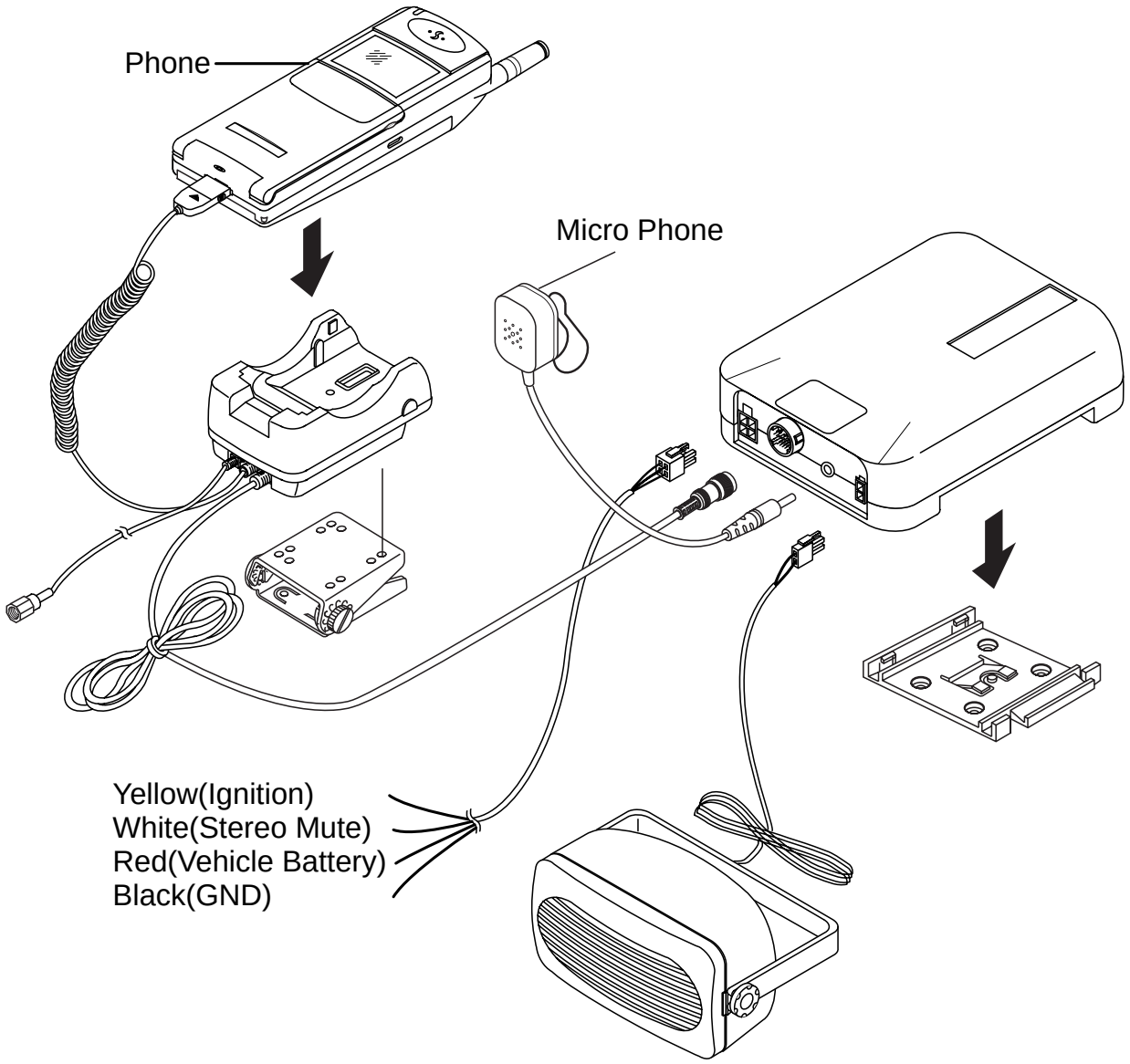
2-11 Hands Free Kit

2-11-1 Hands Free Kit Ass'y



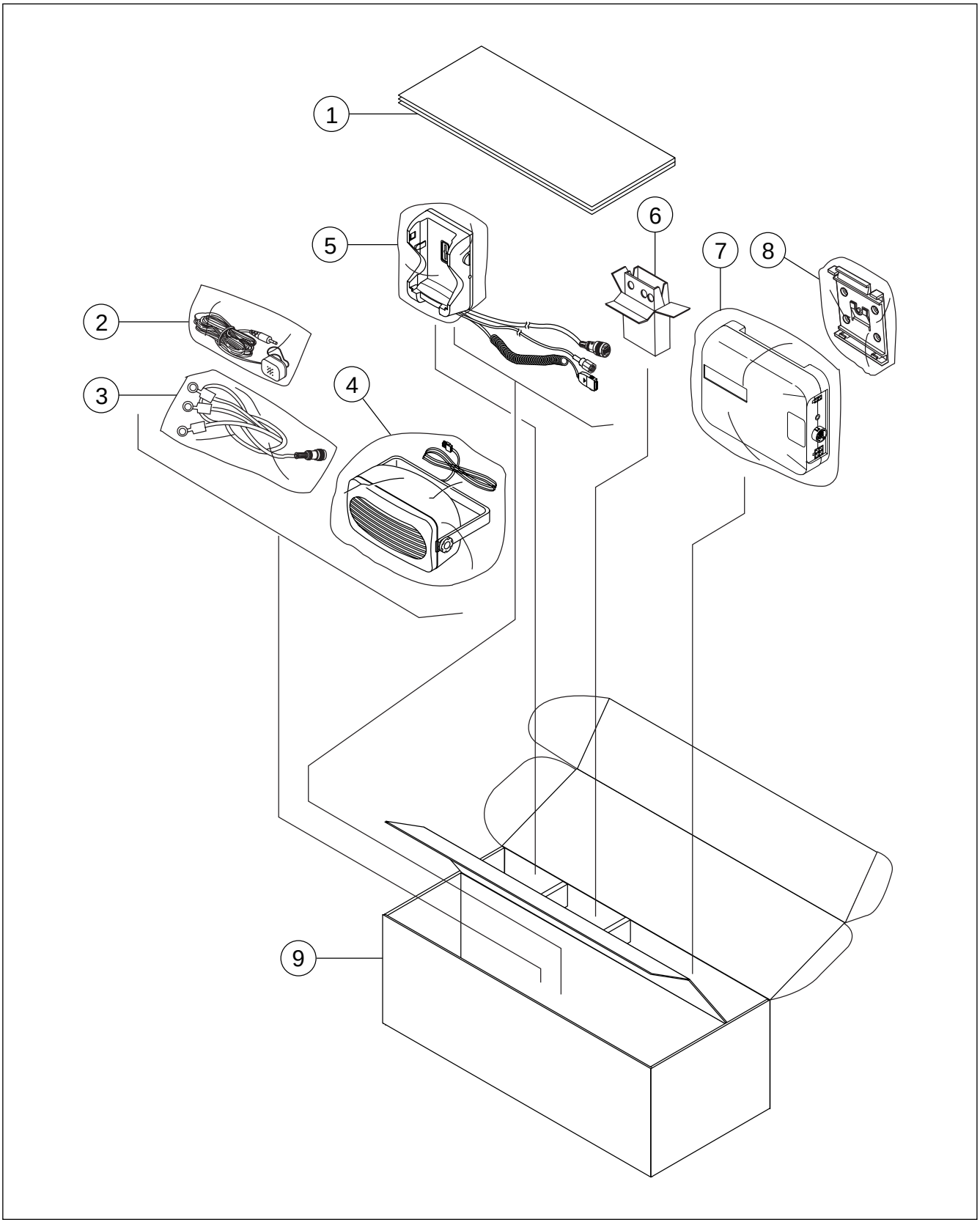
2-12 Hands Free Car Kit Option

2-12-1 Hands Free Car Kit Ass'y



2-13 Hands Free Kit Packing

2-13-1 Hands Free Kit Packing Exploded View



2-13-2 Hands Free Kit Packing Parts List

No	DESCRIPTION	CODE	Q'TY	REMARK
1	User Manual		1	
2	External Mic		1	
3	Power cable		1	
4	External speaker		1	
5	Cradle		1	
6	Install Bracket for cradle		1	
7	Hands free Box		1	
8	Install Bracket for hands-free box		1	
9	Unit Box		1	

1. Exectrical Parts List

Design LOC	Q	DESCRIPTION	SEC	REMARK
ZD2	1	DIODE-SWITCHING,MCL4154	0401-001033	
ZD8	1	DIODE-ZENER,UDZ6.8B	0403-001172	
D4	1	DIODE-SCHOTTKY,PRLL5819	0404-001005	
ZD1	1	DIODE-SCHOTTKY,UPS5817	0404-001044	
ZD9	1	DIODE-SCHOTTKY,UPS5817	0404-001044	
ZD12	1	DIODE-TVS,SM05	0406-001005	
ZD3	1	DIODE-TVS,SM12	0406-001012	
ZD10	1	DIODE-TVS,SMS05C	0406-001051	
ZD5	1	DIODE-TVS,SMF05	0406-001084	
ZD6	1	DIODE-TVS,SMF05	0406-001084	
ZD7	1	DIODE-TVS,SMF05	0406-001084	
ZD8	1	DIODE-TVS,SMF05	0406-001084	
D5	1	DIODE-ARRAY,DAN222	0407-001002	
D6	1	DIODE-ARRAY,DAN222	0407-001002	
D1	1	DIODE-ARRAY,DA221	0407-001006	
D2	1	DIODE-ARRAY,UMN1	0407-001007	
Q3	1	TR-SMALL SIGNAL,2SC4081	0501-000218	
Q4	1	TR-SMALL SIGNAL,2SD2114K	0501-002011	
Q7	1	TR-SMALL SIGNAL,2SD2114K	0501-002011	
Q10	1	TR-SMALL SIGNAL,BFP420	0501-002096	
Q9	1	TR-SMALL SIGNAL,BFP520	0501-002226	
Q14	1	TR-DIGITAL,DTC144EE	0504-000168	
Q15	1	TR-DIGITAL,DTC144EE	0504-000168	
Q16	1	TR-DIGITAL,DTC144EE	0504-000168	
Q5	1	TR-DIGITAL,DTC114YE	0504-001012	
Q8	1	TR-DIGITAL,DTC114YE	0504-001012	
U32	1	TR-ARRAY,UMZ1N	0506-000151	
U7	1	TR-ARRAY,UMC5NTL	0506-001004	
LED1	1	LED,CHIP,Y/GRN	0601-000276	
U31	1	IC-CMOS LOGIC,7W74FU	0801-002001	
U39	1	IC-CMOS LOGIC,7W74FU	0801-002001	
U34	1	IC-CMOS LOGIC,7W126FU	0801-002315	
U33	1	IC-CMOS LOGIC,7W08FU	0801-002397	
U38	1	IC-CMOS LOGIC,7W08FU	0801-002397	
U8	1	IC-EEPROM,24LC128	1103-001090	
U4	1	IC-SRAM,KM616U4110	1106-001274	
U6	1	IC-FLASH MEMORY,MBM29LV160B	1107-001158	
U27	1	IC-POWER AMP,PF01411	1201-001299	
U30	1	IC-POWER AMP,PF0414B	1201-001411	
U19	1	IC-OP AMP,MAX4040	1201-001425	
U16	1	IC-POSI.FIXED REG.,LP2980AIM5X-3.3	1203-001305	
U13	1	IC-VOLTAGE REGULATOR,LP2981AIM5X-3.0	1203-001454	
U9	1	IC-RESET,MAX809REUR-T	1203-001511	
U44	1	IC-BATTERY,LT1510-5CGN	1203-001515	
U14	1	IC-VOLTAGE REGULATOR,LP2982AIM5X-3.0	1203-001701	

Design LOC	Q	DESCRIPTION	SEC	REMARK
U15	1	IC-VOLTAGE REGULATOR,LP2982AIM5X-3.0	1203-001701	
U17	1	IC-VOLTAGE REGULATOR,LP2982AIM5X-3.0	1203-001701	
U18	1	IC-VOLTAGE REGULATOR,LP2982AIM5X-3.0	1203-001701	
U20	1	IC-VOLTAGE REGULATOR,LP2982AIM5X-3.0	1203-001701	
U12	1	IC-DC/DC CONVERTER,MAX1676	1203-001702	
U36	1	IC-DC/DC CONVERTER,LTC1555CGN	1203-001740	
U2	1	IC-DATA COMM.,AD6421AST	1205-001645	
U10	1	IC-COMM. CONTROLLER,AD6426XST	1205-001646	
U26	1	IC-TRANSCEIVER,HD155121F	1205-001653	
U24	1	IC-SYNTHESIZER,LMX2336LTMX	1209-001161	
U23	1	IC-ETC, LINEAR,HD155171T	1209-001208	
TH1	1	THERMISTOR-NTC,47Kohm,5%,4050K,2.0mW/C,TP	1404-001005	
V1	1	VARISTOR.5.6V,-,1.6x0.8mm,TP	1405-001019	
V2	1	VARISTOR.5.6V,-,1.6x0.8mm,TP	1405-001019	
V3	1	VARISTOR.5.6V,-,1.6x0.8mm,TP	1405-001019	
R142	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R143	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R225	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R26	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R261	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R301	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R61	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R62	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R63	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R66	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R67	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R68	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R69	1	R-CHIP,100ohm,5%,1/16W,DA,TP,1005	2007-000138	
R73	1	R-CHIP,220ohm,5%,1/16W,DA,TP,1005	2007-000139	
R74	1	R-CHIP,220ohm,5%,1/16W,DA,TP,1005	2007-000139	
R104	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R18	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R268	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R269	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R272	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R78	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R81	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R83	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R84	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R85	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R86	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R87	1	R-CHIP,1Kohm,5%,1/16W,DA,TP,1005	2007-000140	
R113	1	R-CHIP,2.2Kohm,5%,1/16W,DA,TP,1005	2007-000141	
R31	1	R-CHIP,2.2Kohm,5%,1/16W,DA,TP,1005	2007-000141	
R32	1	R-CHIP,2.2Kohm,5%,1/16W,DA,TP,1005	2007-000141	
R43	1	R-CHIP,2.2Kohm,5%,1/16W,DA,TP,1005	2007-000141	

Design LOC	Q	DESCRIPTION	SEC	REMARK
R90	1	R-CHIP,2.2Kohm,5%,1/16W,DA,TP,1005	2007-000141	
R105	1	R-CHIP,2.7Kohm,5%,1/16W,DA,TP,1005	2007-000142	
R130	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R21	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R22	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R23	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R24	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R27	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R71	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R72	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R89	1	R-CHIP,4.7Kohm,5%,1/16W,DA,TP,1005	2007-000143	
R79	1	R-CHIP,8.2Kohm,5%,1/16W,DA,TP,1005	2007-000147	
R101	1	R-CHIP,10Kohm,5%,1/16W,DA,TP,1005	2007-000148	
R306	1	R-CHIP,10Kohm,5%,1/16W,DA,TP,1005	2007-000148	
R307	1	R-CHIP,10Kohm,5%,1/16W,DA,TP,1005	2007-000148	
R128	1	R-CHIP,15Kohm,5%,1/16W,DA,TP,1005	2007-000151	
R283	1	R-CHIP,47Kohm,5%,1/16W,DA,TP,1005	2007-000157	
R44	1	R-CHIP,47Kohm,5%,1/16W,DA,TP,1005	2007-000157	
R168	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
R231	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
R232	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
R233	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
R235	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
R239	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
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R29	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
R302	1	R-CHIP,100Kohm,5%,1/16W,DA,TP,1005	2007-000162	
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R132	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R292	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R299	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R300	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R304	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R48	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R93	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R94	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	

Design LOC	Q	DESCRIPTION	SEC	REMARK
R95	1	R-CHIP,0ohm,5%,1/16W,DA,TP,1005	2007-000171	
R102	1	R-CHIP,10ohm,5%,1/16W,DA,TP,1005	2007-000172	
R118	1	R-CHIP,10ohm,5%,1/16W,DA,TP,1005	2007-000172	
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R124	1	R-CHIP,10ohm,5%,1/16W,DA,TP,1005	2007-000172	
R125	1	R-CHIP,10ohm,5%,1/16W,DA,TP,1005	2007-000172	
R247	1	R-CHIP,10ohm,5%,1/16W,DA,TP,1005	2007-000172	
R259	1	R-CHIP,10ohm,5%,1/16W,DA,TP,1005	2007-000172	
R263	1	R-CHIP,10ohm,5%,1/16W,DA,TP,1005	2007-000172	
R264	1	R-CHIP,22ohm,5%,1/16W,DA,TP,1005	2007-000173	
R265	1	R-CHIP,22ohm,5%,1/16W,DA,TP,1005	2007-000173	
R116	1	R-CHIP,47ohm,5%,1/16W,DA,TP,1005	2007-000174	
R117	1	R-CHIP,47ohm,5%,1/16W,DA,TP,1005	2007-000174	
R169	1	R-CHIP,10Mohm,5%,1/16W,DA,TP,1608	2007-000305	
R290	1	R-CHIP,470ohm,5%,1/16W,DA,TP,1005	2007-000932	
R291	1	R-CHIP,470ohm,5%,1/16W,DA,TP,1005	2007-000932	
R141	1	R-CHIP,82ohm,5%,1/16W,DA,TP,1005	2007-001217	
R134	1	R-CHIP,18ohm,5%,1/16W,DA,TP,1005	2007-001288	
R135	1	R-CHIP,18ohm,5%,1/16W,DA,TP,1005	2007-001288	
R136	1	R-CHIP,18ohm,5%,1/16W,DA,TP,1005	2007-001288	
R137	1	R-CHIP,18ohm,5%,1/16W,DA,TP,1005	2007-001288	
R266	1	R-CHIP,33ohm,5%,1/16W,DA,TP,1005	2007-001292	
R129	1	R-CHIP,51ohm,5%,1/16W,DA,TP,1005	2007-001298	
R160	1	R-CHIP,51ohm,5%,1/16W,DA,TP,1005	2007-001298	
R162	1	R-CHIP,68ohm,5%,1/16W,DA,TP,1005	2007-001301	
R163	1	R-CHIP,68ohm,5%,1/16W,DA,TP,1005	2007-001301	
R138	1	R-CHIP,120ohm,5%,1/16W,DA,TP,1005	2007-001305	
R152	1	R-CHIP,120ohm,5%,1/16W,DA,TP,1005	2007-001305	
R153	1	R-CHIP,120ohm,5%,1/16W,DA,TP,1005	2007-001305	
R161	1	R-CHIP,120ohm,5%,1/16W,DA,TP,1005	2007-001305	
R106	1	R-CHIP,150ohm,5%,1/16W,DA,TP,1005	2007-001306	
R164	1	R-CHIP,150ohm,5%,1/16W,DA,TP,1005	2007-001306	
R133	1	R-CHIP,180ohm,5%,1/16W,DA,TP,1005	2007-001307	
R50	1	R-CHIP,200ohm,5%,1/16W,DA,TP,1005	2007-001308	
R11	1	R-CHIP,1.2Kohm,5%,1/16W,DA,TP,1005	2007-001319	
R14	1	R-CHIP,1.2Kohm,5%,1/16W,DA,TP,1005	2007-001319	
R295	1	R-CHIP,1.2Kohm,5%,1/16W,DA,TP,1005	2007-001319	
R296	1	R-CHIP,1.2Kohm,5%,1/16W,DA,TP,1005	2007-001319	
R103	1	R-CHIP,3.3Kohm,5%,1/16W,DA,TP,1005	2007-001325	
R267	1	R-CHIP,15OHM,5%,1/16W,DA,TP,1005	2007-002965	
R115	1	R-CHIP,300OHM,5%,1/16W,DA,TP,1005	2007-007008	
R274	1	R-CHIP,300OHM,5%,1/16W,DA,TP,1005	2007-007008	

Design LOC	Q	DESCRIPTION	SEC	REMARK
R114	1	R-CHIP,75KOHM,5%,1/16W,DA,TP,1005	2007-007021	
R7	1	R-CHIP,475Kohm,1%,1/16W,DA,TP,1005	2007-007098	
R278	1	R-CHIP,18Kohm,1%,1/16W,DA,TP,1005	2007-007135	
R158	1	R-CHIP,4.7Kohm,1%,1/16W,DA,TP,1005	2007-007136	
R154	1	R-CHIP,1.2Kohm,1%,1/16W,DA,TP,1005	2007-007137	
R91	1	R-CHIP,27Kohm,1%,1/16W,DA,TP,1005	2007-007138	
R111	1	R-CHIP,10Kohm,1%,1/16W,DA,TP,1005	2007-007142	
R150	1	R-CHIP,10Kohm,1%,1/16W,DA,TP,1005	2007-007142	
R277	1	R-CHIP,12Kohm,1%,1/16W,DA,TP,1005	2007-007309	
R151	1	R-CHIP,22Kohm,1%,1/16W,DA,TP,1005	2007-007311	
R157	1	R-CHIP,20Kohm,1%,1/16W,DA,TP,1005	2007-007312	
R76	1	R-CHIP,20Kohm,1%,1/16W,DA,TP,1005	2007-007312	
R126	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R127	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R144	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R145	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R146	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R147	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R148	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R149	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R156	1	R-CHIP,6.8Kohm,1%,1/16W,DA,TP,1005	2007-007313	
R51	1	R-CHIP,200Kohm,1%,1/16W,DA,TP,1005	2007-007334	
R276	1	R-CHIP,7.5Kohm,1%,1/16W,DA,TP,1005	2007-007470	
R56	1	R-CHIP,150Kohm,1%,1/16W,DA,TP,1005	2007-007489	
R57	1	R-CHIP,91Kohm,1%,1/16W,DA,TP,1005	2007-007529	
R271	1	R-CHIP,56Kohm,1%,1/16W,DA,TP,1005	2007-007538	
R155	1	R-CHIP,1.8Kohm,1%,1/16W,DA,TP,1005	2007-007588	
R55	1	R-CHIP,68Kohm,1%,1/16W,DA,TP,1005	2007-007589	
R77	1	R-CHIP,82Kohm,1%,1/16W,DA,TP,1005	2007-007590	
R279	1	R-CHIP,270Kohm,1%,1/16W,DA,TP,1005	2007-007592	
C112	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C113	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C114	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C115	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C116	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C117	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C119	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C120	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C121	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C162	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C23	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C24	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C241	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C242	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C244	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C25	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	

Design LOC	Q	DESCRIPTION	SEC	REMARK
C26	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C70	1	C-CERAMIC,CHIP,100pF,5%,50V,NPO,TP,1005,-	2203-000233	
C100	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C102	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C103	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C104	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C105	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C106	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C107	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C125	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C217	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C225	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C226	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C280	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C296	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C297	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C45	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C46	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C66	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C69	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C74	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C90	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C94	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C95	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C96	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C97	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C98	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C99	1	C-CERAMIC,CHIP,10nF,10%,16V,X7R,TP,1005,-	2203-000254	
C147	1	C-CERAMIC,CHIP,10pF,0.5pF,50V,NPO,TP,1005,-	2203-000278	
C149	1	C-CERAMIC,CHIP,10pF,0.5pF,50V,NPO,TP,1005,-	2203-000278	
C150	1	C-CERAMIC,CHIP,10pF,0.5pF,50V,NPO,TP,1005,-	2203-000278	
C152	1	C-CERAMIC,CHIP,10pF,0.5pF,50V,NPO,TP,1005,-	2203-000278	
C245	1	C-CERAMIC,CHIP,10pF,0.5pF,50V,NPO,TP,1005,-	2203-000278	
C209	1	C-CERAMIC,CHIP,150pF,5%,50V,NPO,TP,1005,-	2203-000359	
C246	1	C-CERAMIC,CHIP,15pF,5%,50V,NPO,TP,1005,-	2203-000386	
C269	1	C-CERAMIC,CHIP,15pF,5%,50V,NPO,TP,1005,-	2203-000386	
C271	1	C-CERAMIC,CHIP,15pF,5%,50V,NPO,TP,1005,-	2203-000386	
C54	1	C-CERAMIC,CHIP,15pF,5%,50V,NPO,TP,1005,-	2203-000386	
C144	1	C-CERAMIC,CHIP,18pF,5%,50V,NPO,TP,1005,-	2203-000425	
C179	1	C-CERAMIC,CHIP,18pF,5%,50V,NPO,TP,1005,-	2203-000425	
C183	1	C-CERAMIC,CHIP,18pF,5%,50V,NPO,TP,1005,-	2203-000425	
C184	1	C-CERAMIC,CHIP,18pF,5%,50V,NPO,TP,1005,-	2203-000425	
C109	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C110	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C131	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C132	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	

Design LOC	Q	DESCRIPTION	SEC	REMARK
C134	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C135	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C136	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C137	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C139	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C140	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C142	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C143	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C240	1	C-CERAMIC,CHIP,1nF,10%,50V,X7R,TP,1005,-	2203-000438	
C122	1	C-CERAMIC,CHIP,1pF,0.25pF,50V,NPO,TP,1005,-	2203-000466	
C189	1	C-CERAMIC,CHIP,1pF,0.25pF,50V,NPO,TP,1005,-	2203-000466	
C207	1	C-CERAMIC,CHIP,1pF,0.25pF,50V,NPO,TP,1005,-	2203-000466	
C176	1	C-CERAMIC,CHIP,220pF,10%,50V,X7R,TP,1005,-	2203-000585	
C177	1	C-CERAMIC,CHIP,22pF,5%,50V,NPO,TP,1005,-	2203-000628	
C178	1	C-CERAMIC,CHIP,22pF,5%,50V,NPO,TP,1005,-	2203-000628	
C164	1	C-CERAMIC,CHIP,24pF,5%,50V,NPO,TP,1005,-	2203-000643	
C165	1	C-CERAMIC,CHIP,24pF,5%,50V,NPO,TP,1005,-	2203-000643	
C194	1	C-CERAMIC,CHIP,24pF,5%,50V,NPO,TP,1005,-	2203-000643	
C195	1	C-CERAMIC,CHIP,24pF,5%,50V,NPO,TP,1005,-	2203-000643	
C196	1	C-CERAMIC,CHIP,24pF,5%,50V,NPO,TP,1005,-	2203-000643	
C239	1	C-CERAMIC,CHIP,24pF,5%,50V,NPO,TP,1005,-	2203-000643	
C270	1	C-CERAMIC,CHIP,24pF,5%,50V,NPO,TP,1005,-	2203-000643	
C126	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C127	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C128	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C129	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C130	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C157	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C158	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C160	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C161	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C222	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C223	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C227	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C228	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C238	1	C-CERAMIC,CHIP,27pF,5%,50V,NPO,TP,1005,-	2203-000679	
C185	1	C-CERAMIC,CHIP,2pF,0.25pF,50V,NPO,TP,1005,-	2203-000696	
C186	1	C-CERAMIC,CHIP,2pF,0.25pF,50V,NPO,TP,1005,-	2203-000696	
C187	1	C-CERAMIC,CHIP,2pF,0.25pF,50V,NPO,TP,1005,-	2203-000696	
C201	1	C-CERAMIC,CHIP,33pF,5%,50V,NPO,TP,1005,-	2203-000812	
C202	1	C-CERAMIC,CHIP,33pF,5%,50V,NPO,TP,1005,-	2203-000812	
C204	1	C-CERAMIC,CHIP,33pF,5%,50V,NPO,TP,1005,-	2203-000812	
C267	1	C-CERAMIC,CHIP,33pF,5%,50V,NPO,TP,1005,-	2203-000812	
C293	1	C-CERAMIC,CHIP,33pF,5%,50V,NPO,TP,1005,-	2203-000812	
C294	1	C-CERAMIC,CHIP,39pF,5%,50V,NPO,TP,1005,-	2203-000854	
C295	1	C-CERAMIC,CHIP,39pF,5%,50V,NPO,TP,1005,-	2203-000854	

Design LOC	Q	DESCRIPTION	SEC	REMARK
C166	1	C-CERAMIC,CHIP,3pF,0.25pF,50V,NPO,TP,1005,-	2203-000870	
C167	1	C-CERAMIC,CHIP,3pF,0.25pF,50V,NPO,TP,1005,-	2203-000870	
C211	1	C-CERAMIC,CHIP,3pF,0.25pF,50V,NPO,TP,1005,-	2203-000870	
C2	1	C-CERAMIC,CHIP,47pF,5%,50V,NPO,TP,1005,-	2203-000995	
C289	1	C-CERAMIC,CHIP,47pF,5%,50V,NPO,TP,1005,-	2203-000995	
C156	1	C-CERAMIC,CHIP,4pF,0.25pF,50V,NPO,TP,1005,-	2203-001017	
C203	1	C-CERAMIC,CHIP,4pF,0.25pF,50V,NPO,TP,1005,-	2203-001017	
C224	1	C-CERAMIC,CHIP,5.6nF,10%,25V,X7R,TP,1005,-	2203-001033	
C200	1	C-CERAMIC,CHIP,820pF,10%,50V,X7R,TP,1005,-	2203-001221	
C212	1	C-CERAMIC,CHIP,8pF,0.5pF,50V,NPO,TP,1005,-	2203-001259	
C213	1	C-CERAMIC,CHIP,8pF,0.5pF,50V,NPO,TP,1005,-	2203-001259	
C214	1	C-CERAMIC,CHIP,8pF,0.5pF,50V,NPO,TP,1005,-	2203-001259	
C237	1	C-CERAMIC,CHIP,8pF,0.5pF,50V,NPO,TP,1005,-	2203-001259	
C123	1	C-CERAMIC,CHIP,0.5pF,0.25pF,50V,NPO,TP,1005,-	2203-001383	
C154	1	C-CERAMIC,CHIP,0.5pF,0.25pF,50V,NPO,TP,1005,-	2203-001383	
C205	1	C-CERAMIC,CHIP,0.5pF,0.25pF,50V,NPO,TP,1005,-	2203-001383	
C188	1	C-CERAMIC,CHIP,1.5pF,0.25pF,50V,NPO,TP,1005,1	2203-001385	
C229	1	C-CERAMIC,CHIP,47nF,10%,16V,Y5V,TP,1005,1.0mm	2203-001432	
C278	1	C-CERAMIC,CHIP,47nF,10%,16V,Y5V,TP,1005,1.0mm	2203-001432	
C279	1	C-CERAMIC,CHIP,47nF,10%,16V,Y5V,TP,1005,1.0mm	2203-001432	
C153	1	C-CERAMIC,CHIP,5pF,0.25pF,50V,X7R,TP,1005,1.0	2203-001437	
C52	1	C-CERAMIC,CHIP,2.2uF,+80-20%,16V,Y5V,TP,2012,	2203-001598	
C55	1	C-CERAMIC,CHIP,2.2uF,+80-20%,16V,Y5V,TP,2012,	2203-001598	
C56	1	C-CERAMIC,CHIP,2.2uF,+80-20%,16V,Y5V,TP,2012,	2203-001598	
C59	1	C-CERAMIC,CHIP,2.2uF,+80-20%,16V,Y5V,TP,2012,	2203-001598	
C60	1	C-CERAMIC,CHIP,2.2uF,+80-20%,16V,Y5V,TP,2012,	2203-001598	
C72	1	C-CERAMIC,CHIP,2.2uF,+80-20%,16V,Y5V,TP,2012,	2203-001598	
C198	1	C-CERAMIC,CHIP,330pF,10%,50V,X7R,TP,1005,-	2203-002443	
C174	1	C-CERAMIC,CHIP,560pF,10%,50V,X7R,TP,1005,-	2203-002525	
C175	1	C-CERAMIC,CHIP,560pF,10%,50V,X7R,TP,1005,-	2203-002525	
C199	1	C-CERAMIC,CHIP,560pF,10%,50V,X7R,TP,1005,-	2203-002525	
C20	1	C-CERAMIC,CHIP,51pF,5%,50V,CH,TP,1005,-	2203-002968	
C151	1	C-CERAMIC,CHIP,9PF,0.25PF,50V,CH,TP,1005,-	2203-003054	
C243	1	C-CERAMIC,CHIP,9PF,0.25PF,50V,CH,TP,1005,-	2203-003054	
C145	1	C-CERAMIC,CHIP,1.8pF,0.25pF,50V,NPO,TP,1005,-	2203-005050	
C155	1	C-CERAMIC,CHIP,3.3pF,0.25pF,50V,NPO,TP,1005,-	2203-005052	
C170	1	C-CERAMIC,CHIP,8.2pF,0.25pF,50V,NPO,TP,1005,-	2203-005057	
C171	1	C-CERAMIC,CHIP,8.2pF,0.25pF,50V,NPO,TP,1005,-	2203-005057	
C172	1	C-CERAMIC,CHIP,8.2pF,0.25pF,50V,NPO,TP,1005,-	2203-005057	
C173	1	C-CERAMIC,CHIP,8.2pF,0.25pF,50V,NPO,TP,1005,-	2203-005057	
C10	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C11	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C12	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C13	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C16	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C219	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	

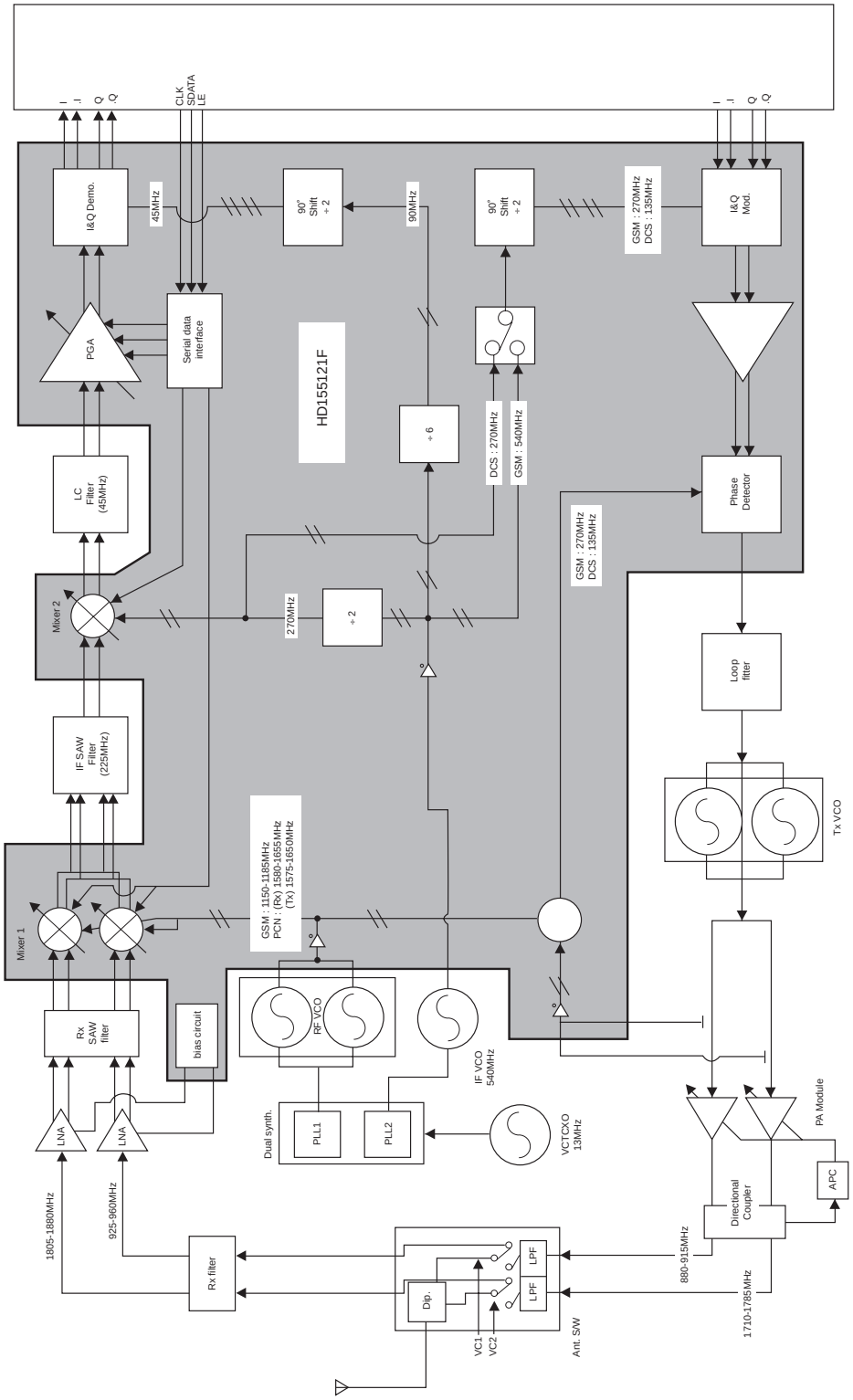
Design LOC	Q	DESCRIPTION	SEC	REMARK
C22	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C220	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C250	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C251	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C252	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C253	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C255	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C256	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C257	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C258	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C259	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C260	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C261	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C272	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C273	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C28	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C287	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C288	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C290	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C291	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C30	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C32	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C33	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C34	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C35	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C36	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C37	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C38	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C4	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C40	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C41	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C43	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C48	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C5	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C6	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C62	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C7	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C8	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C9	1	C-CERAMIC,CHIP,100nF,+80-20%,16V,Y5V,TP,1005,	2203-005061	
C254	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C282	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C283	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C284	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C285	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C31	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C58	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	

Design LOC	Q	DESCRIPTION	SEC	REMARK
C64	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C76	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C77	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C78	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C81	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C88	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C89	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C91	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C92	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C93	1	C-CERAMIC,CHIP,1uF,+80-20%,10V,Y5V,TP,1608,-	2203-005065	
C146	1	C-CERAMIC,CHIP,1.2pF,0.25pF,50V,NPO,TP,1005,0	2203-005234	
C87	1	C-FILM,CHIP,22nF,5%,16V,TP,3.2x1.6x0.8,-	2301-001199	
C82	1	C-FILM,CHIP,6.8nF,5%,16V,TP,2012,-	2301-001213	
C80	1	C-FILM,CHIP,10nF,5%,16V,TP,2012,-	2301-001230	
C84	1	C-FILM,CHIP,680pF,5%,50V,TP,2012,-	2301-001231	
C83	1	C-FILM,CHIP,470pF,5%,50V,TP,2012,-	2301-001232	
C79	1	C-FILM,CHIP,2.2nF,5%,50V,TP,2012,-	2301-001233	
C263	1	C-TA,CHIP,3.3uF,20%,16V,-,TP,3216,-	2404-000335	
C264	1	C-TA,CHIP,3.3uF,20%,16V,-,TP,3216,-	2404-000335	
C42	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C49	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C50	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C51	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C57	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C61	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C63	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C65	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C73	1	C-TA,CHIP,10uF,20%,10V,GP,TP,3216,3.2	2404-001020	
C44	1	C-TA,CHIP,220uF,20%,6.3V,LZ,TP,7125,-	2404-001083	
C67	1	C-TA,CHIP,220uF,20%,6.3V,LZ,TP,7125,-	2404-001083	
C86	1	C-TA,CHIP,220uF,20%,6.3V,LZ,TP,7125,-	2404-001083	
C14	1	C-TA,CHIP,10UF,20%,6.3V,GP,TP,2012	2404-001105	
C262	1	C-TA,CHIP,10UF,20%,6.3V,GP,TP,2012	2404-001105	
L17	1	INDUCTOR-SMD,47nH,5%,2.29x1.73x1.52mm	2703-001044	
L18	1	INDUCTOR-SMD,47nH,5%,2.29x1.73x1.52mm	2703-001044	
L22	1	INDUCTOR-SMD,120nH,5%,2.29x1.73x1.52mm	2703-001069	
L23	1	INDUCTOR-SMD,27nH,10%,1x0.5x0.5mm	2703-001181	
L5	1	INDUCTOR-SMD,1.5nH,0.3nH,1.6x0.8x0.8mm	2703-001267	
L1	1	INDUCTOR-SMD,47uH,20%,6.6x4.45x2.5mm	2703-001556	
L13	1	INDUCTOR-SMD,33nH,5%,1.0x0.5x0.5mm	2703-001723	
L14	1	INDUCTOR-SMD,33nH,5%,1.0x0.5x0.5mm	2703-001723	
L24	1	INDUCTOR-SMD,8.2nH,5%,1x0.5x0.5mm	2703-001733	
L8	1	INDUCTOR-SMD,6.8nH,5%,1x0.5x0.5mm	2703-001734	
L2	1	INDUCTOR-SMD,2.7nH,0.3nH,1x0.5x0.5mm	2703-001737	
L20	1	INDUCTOR-SMD,68nH,5%,2.29x1.73x1.52mm	2703-001745	
L19	1	INDUCTOR-SMD,82nH,5%,2.29x1.73x1.52mm	2703-001746	

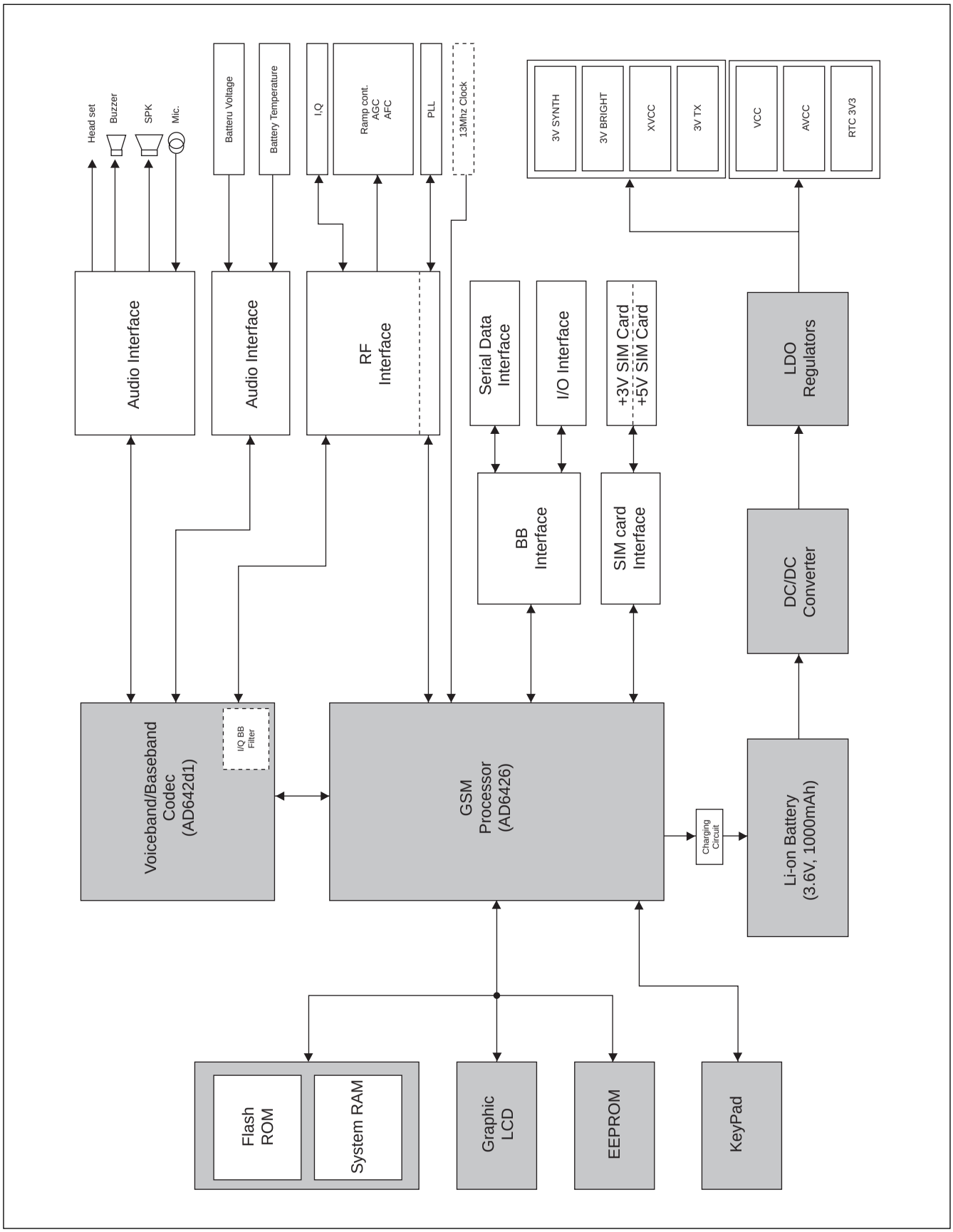
Design LOC	Q	DESCRIPTION	SEC	REMARK
L10	1	INDUCTOR-SMD,4.7nH,0.3nH,1.0x0.5x0.5mm	2703-001747	
L12	1	INDUCTOR-SMD,4.7nH,0.3nH,1.0x0.5x0.5mm	2703-001747	
L15	1	INDUCTOR-SMD,4.7nH,0.3nH,1.0x0.5x0.5mm	2703-001747	
L27	1	INDUCTOR-SMD,4.7nH,0.3nH,1.0x0.5x0.5mm	2703-001747	
L6	1	INDUCTOR-SMD,4.7nH,0.3nH,1.0x0.5x0.5mm	2703-001747	
L7	1	INDUCTOR-SMD,3.9nH,0.3nH,1.0x0.5x0.5mm	2703-001751	
L25	1	INDUCTOR-SMD,10UH,20%,4.45X6.6X2.5MM	2703-001781	
L11	1	INDUCTOR-SMD,10NH,5%,1.0X0.5X0.5MM	2703-001786	
L4	1	INDUCTOR-SMD,10NH,5%,1.0X0.5X0.5MM	2703-001786	
L9	1	INDUCTOR-SMD,10NH,5%,1.0X0.5X0.5MM	2703-001786	
L16	1	INDUCTOR-SMD,3.3NH,0.3NH,1.0X0.5X0.5MM	2703-001790	
OSC1	1	CRYSTAL-SMD,MC-156	2801-003760	
OSC4	1	OSCILLATOR-VCO,VOU0540N30KRA	2806-001176	
OSC3	1	OSCILLATOR-VCO,QVC101747RT-4042	2806-001195	
OSC2	1	OSCILLATOR-VCO,QVC101615RT-4041	2806-001196	
U22	1	OSCILLATOR-VCTCXO13MHz,5ppm,10Kohm//10pF,TP,3V,	2809-001220	
E1	1	FILTER-EMI SMD,50V,300mA,-,470pF,2x1.25x0.5,T	2901-001116	
E4	1	FILTER-EMI SMD,50V,300mA,-,470pF,2x1.25x0.5,T	2901-001116	
E5	1	FILTER-EMI SMD,50V,300mA,-,470pF,2x1.25x0.5,T	2901-001116	
E6	1	FILTER-EMI SMD,50V,300mA,-,470pF,2x1.25x0.5,T	2901-001116	
E7	1	FILTER-EMI SMD,50V,300mA,-,470pF,2x1.25x0.5,T	2901-001116	
E2	1	FILTER-EMI SMD,NFM2012P13C474	2901-001162	
F3	1	FILTER-SAW,B4822	2904-001092	
F1	1	FILTER-SAW,FAR-G6CH-1G8425-L224	2904-001166	
F2	1	FILTER-SAW,FAR-G6CH-1G8425-L224	2904-001166	
U21	1	FILTER-DUPLEXER,SHS-L090D	2909-001086	
CN4	1	CONNECTOR-CARD EDGE,1-338063-9	3709-001121	
M1	1	CONNECTOR-SOCKET,24-8005-002-000-867	3710-001105	
M2	1	CONNECTOR-SOCKET,24-8005-002-000-867	3710-001105	
CN3	1	CONNECTOR-SOCKET,MQ/S179-SAA-18P/4	3710-001302	
CN1	1	CONNECTOR-SOCKET,AXK5F30535P	3710-001415	
CN5	1	JACK-PHONE,02-699B0-53BKA	3722-001303	
B1	1	BATTERY-POLYMER,PAS614L-VL3	4302-001026	
U29	1	COUPLER-DIRECTION,LDC15D190A007A	4709-001144	
-	1	SPEAKER,LT301	3001-001099	

3. Block Diagram

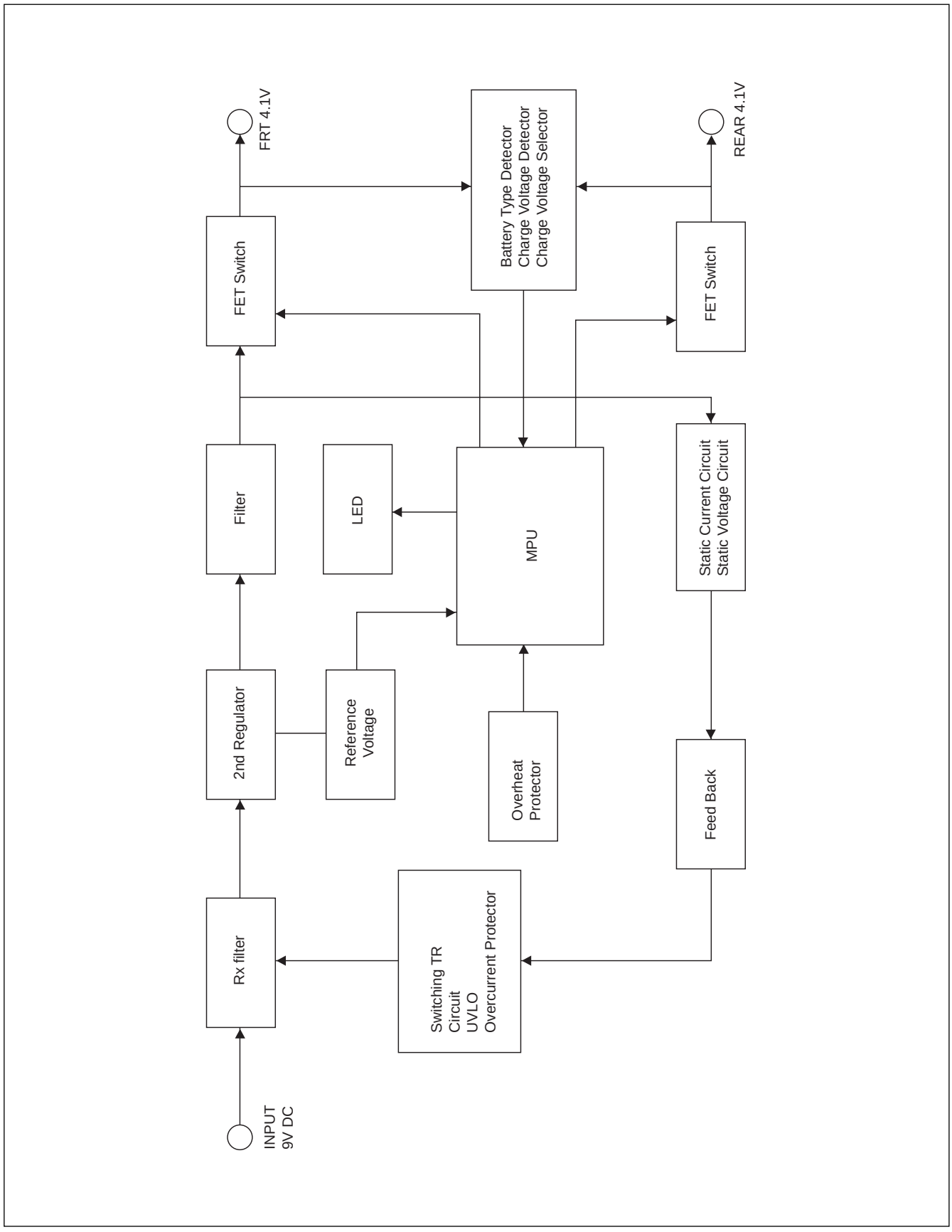
3-1 RF Block Diagram



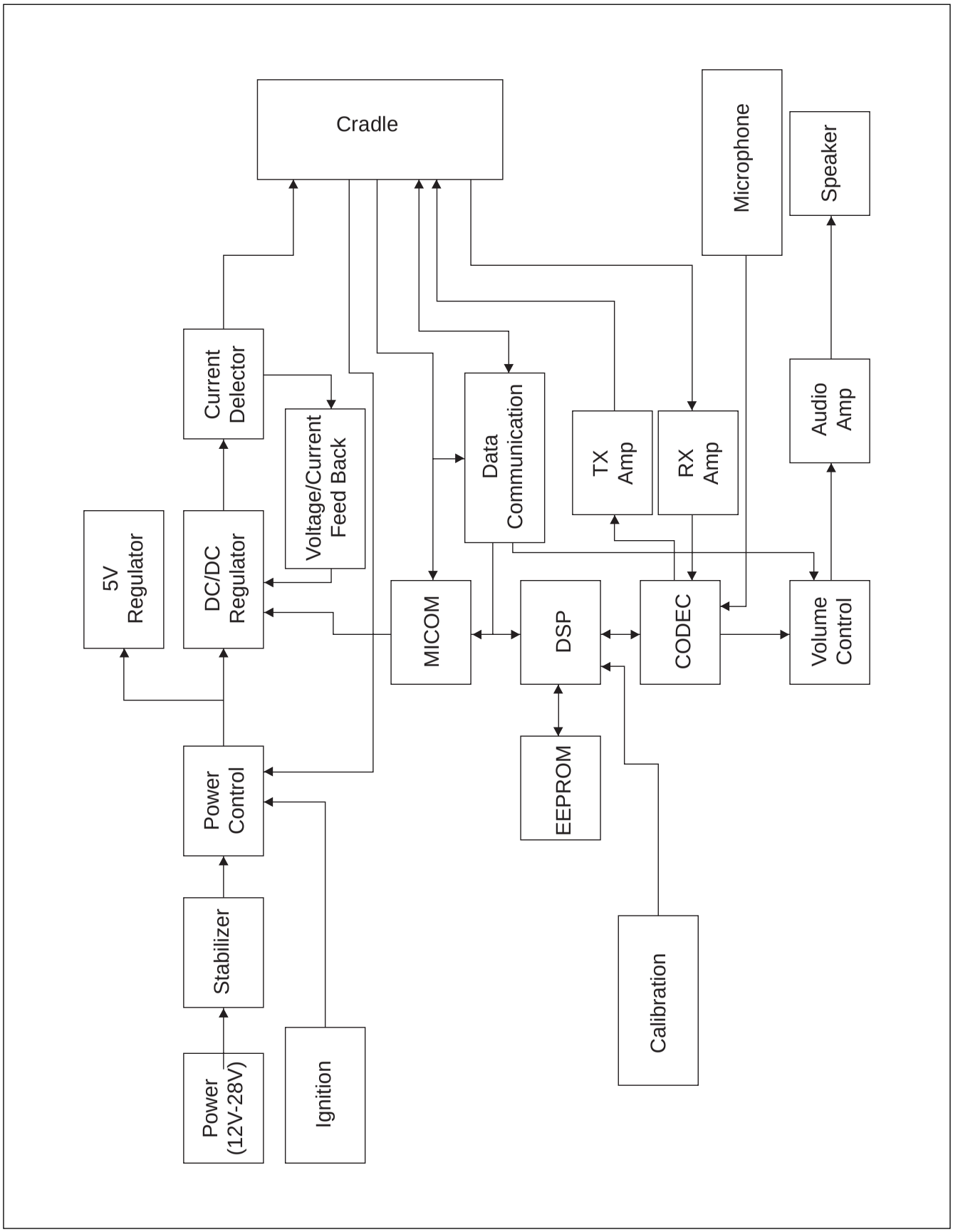
3-2 Baseband Block Diagram



3-3 DTC Block Diagram



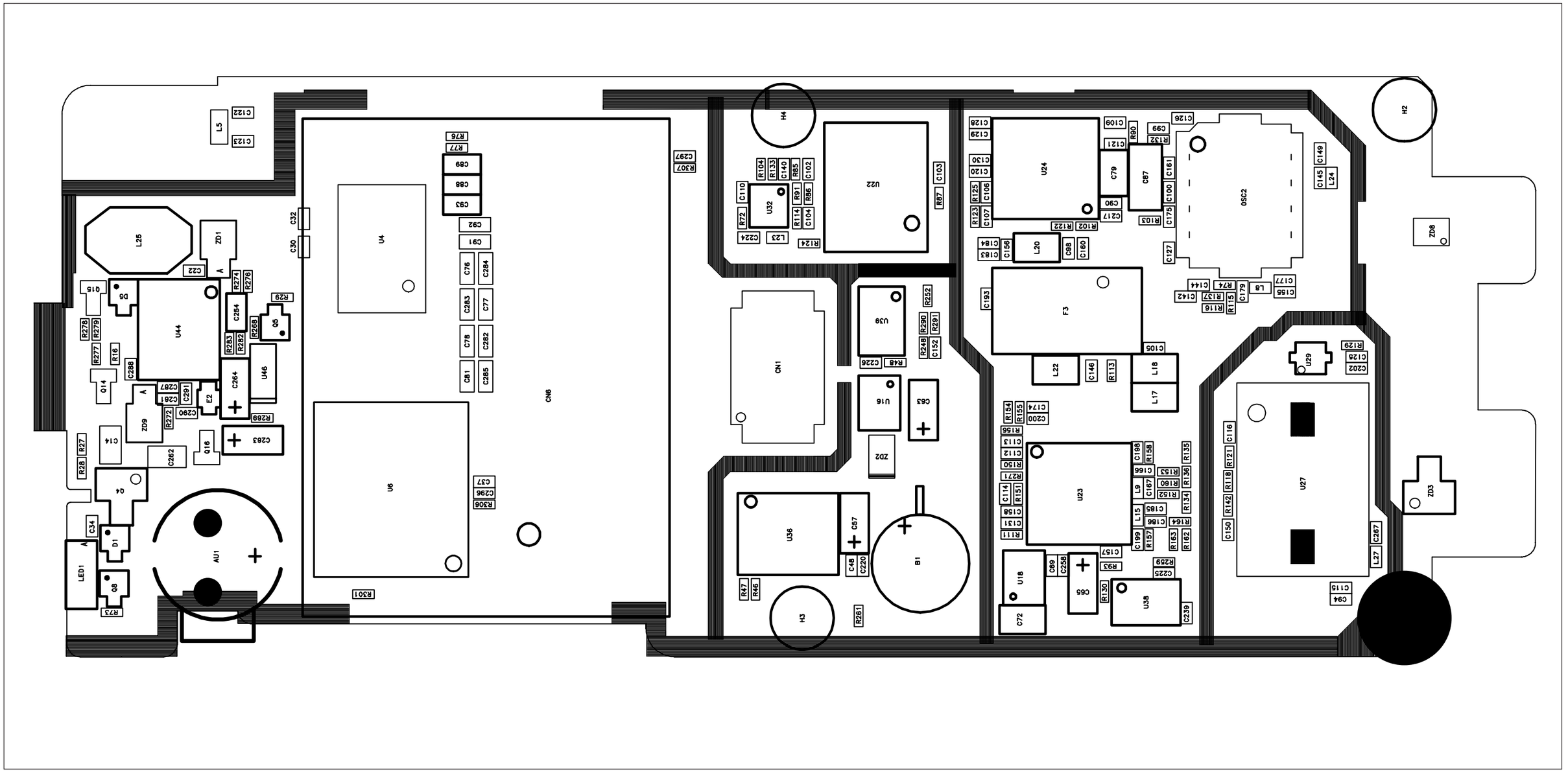
3-4 HFK Block Diagram



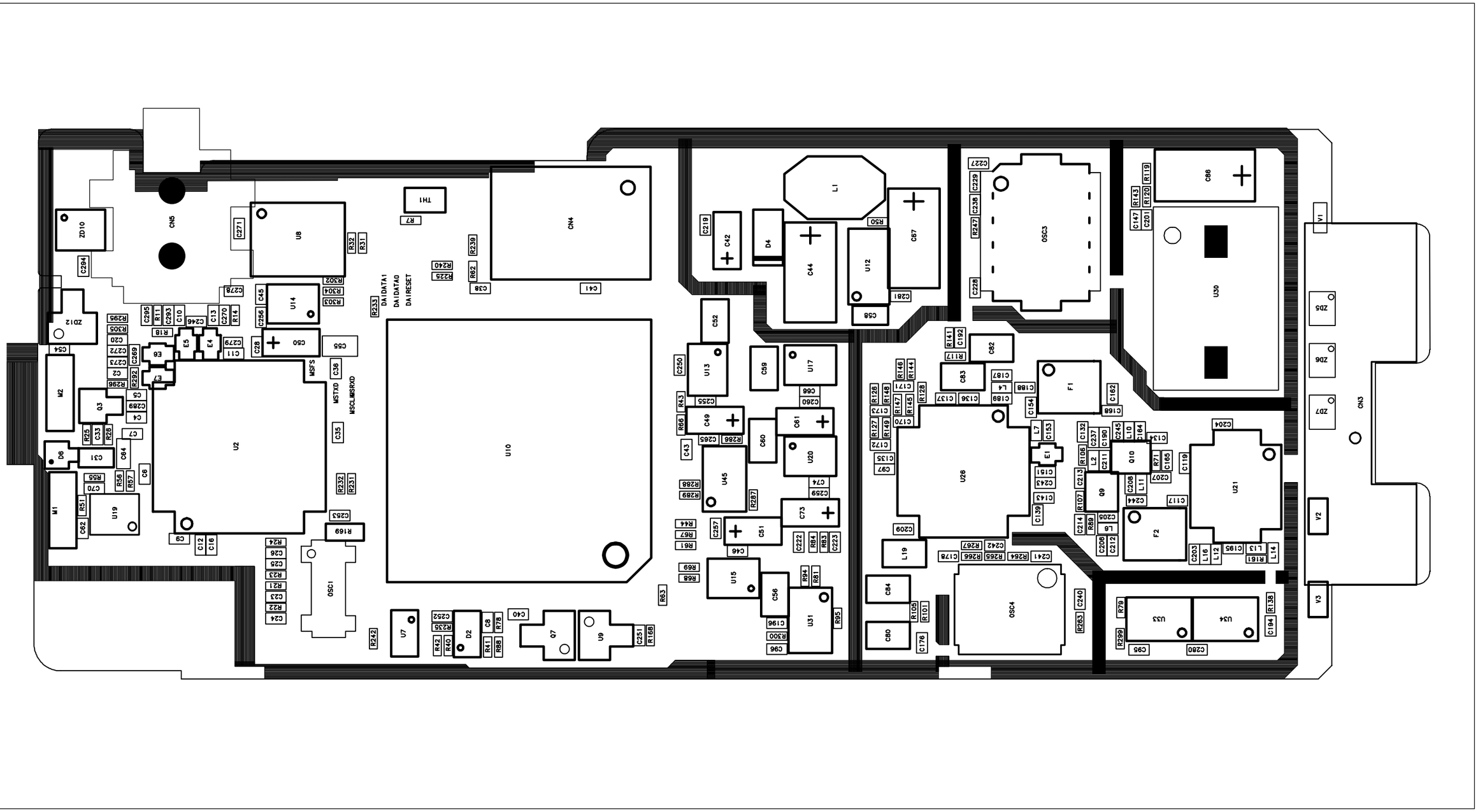
4. PCB Diagram

4-1 Main PCB

Top View

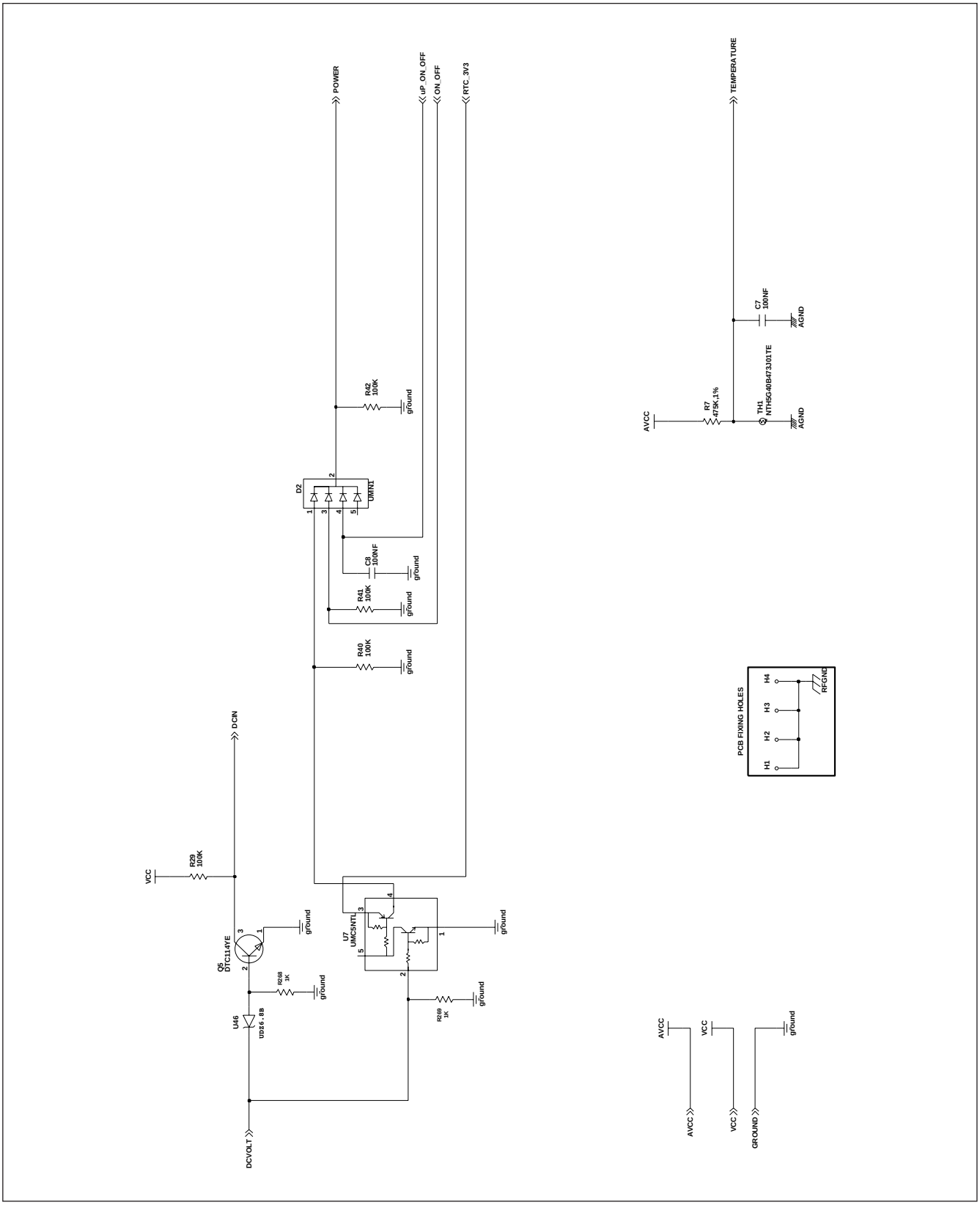


Bottom View

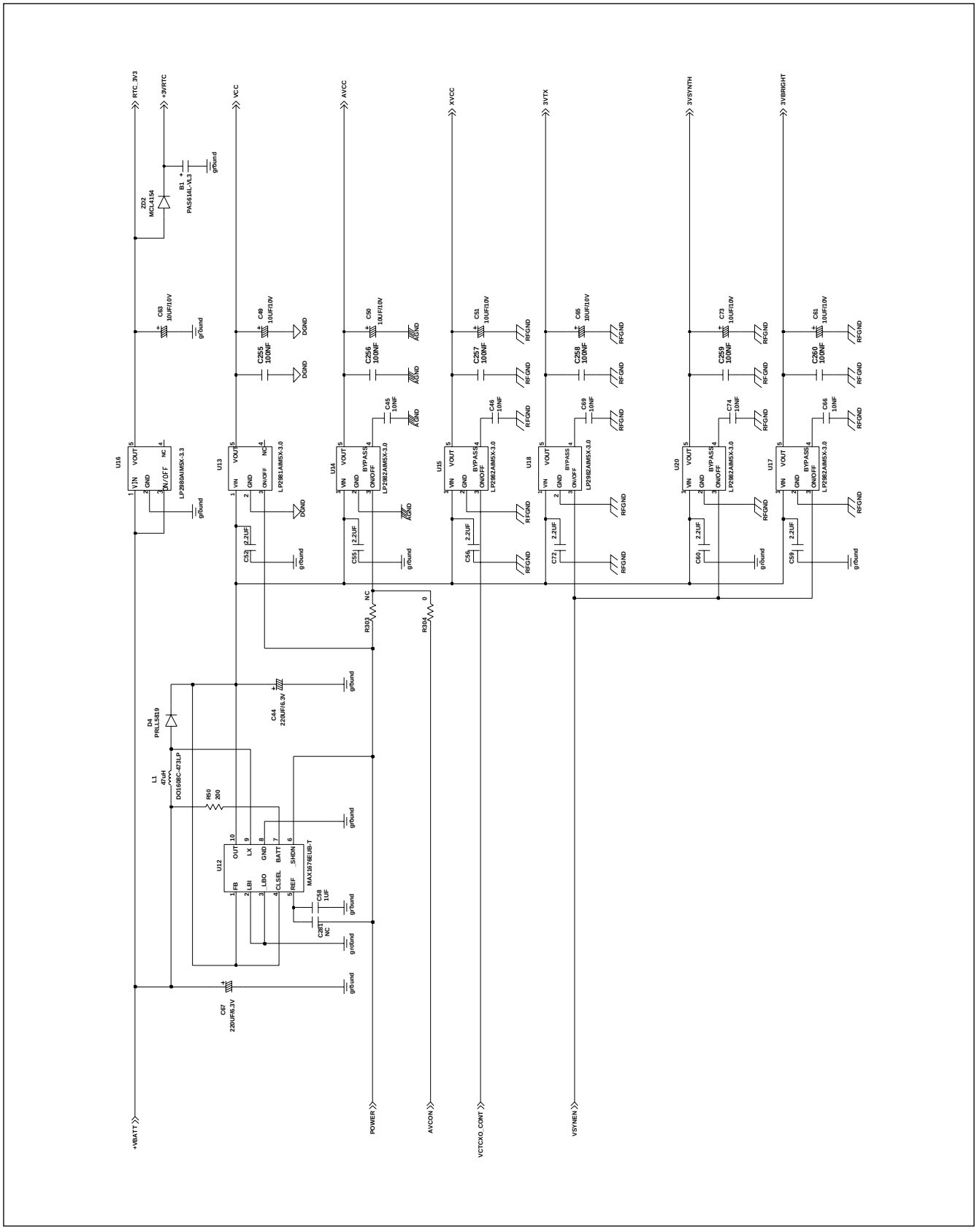

CN5
ZD10
C294
C271
U8
R32
R31
TH1
R7
CN4
C41
R239
R240
R225
R62
C38
C278
C45
U14
R303
R304
R302
C256
R233
DA1DATA1
DA1DATA0
DA1RESET
ZD12
R295
C295
R11
C293
C10
C246
C13
C270
R14
R18
C279
C11
C28
C50
C55
C54
E5
E4
E6
E7
C272
C273
C269
C2
R296
C5
C4
C289
C7
C64
C8
C9
C12
C16
M2
Q3
R25
C33
R26
D6
C31
M1
R55
C70
R56
R57
R51
U19
C62
U2
MSFS
C36
MSTXD
MSCLMSRXD
C35
R232
R231
C265
R169
R24
C26
C25
R23
R21
C23
R22
C24
OSC1
U10
R242
U7
C252
R235
D2
C8
R78
R41
R88
R42
R40
C40
Q7
U9
C251
R168
C52
U13
C250
C59
U17
C260
C66
R43
C49
C255
R66
C61
C60
U20
C74
C259
C43
R286
U45
R288
R289
R287
C73
C257
C51
C222
R84
R83
C223
C46
R44
R67
R61
R68
R69
U15
C56
R94
R81
U31
R95
R63
C196
R300
C96
L1
C219
C42
D4
C44
R50
U12
C67
C281
C58
C227
C229
C238
R247
C228
OSC3
C86
R119
R143
R120
C147
C201
U30
V1
ZD5
ZD6
ZD7
CN3
V2
V3
R141
C192
R117
C82
C83
C187
L4
C188
C189
C154
F1
C162
C168
R146
R144
C171
R148
R128
C137
C136
R147
R145
C173
C170
R127
R149
C172
C135
C97
U26
L7
C153
E1
C151
C243
C143
C139
C132
C237
C190
C245
L10
C184
C213
R106
L2
C211
Q10
R71
C165
C119
C204
C207
C208
L11
C214
R107
Q9
R89
C205
L9
C206
C212
F2
C244
C117
U21
C203
L16
L12
C195
L13
R161
L14
C209
L19
C242
R267
R266
R265
R264
C178
C241
C84
C80
R105
R101
C176
OSC4
C240
R263
R79
R299
U33
U34
R138
C194
C95
C260

5. Schematic Diagrams

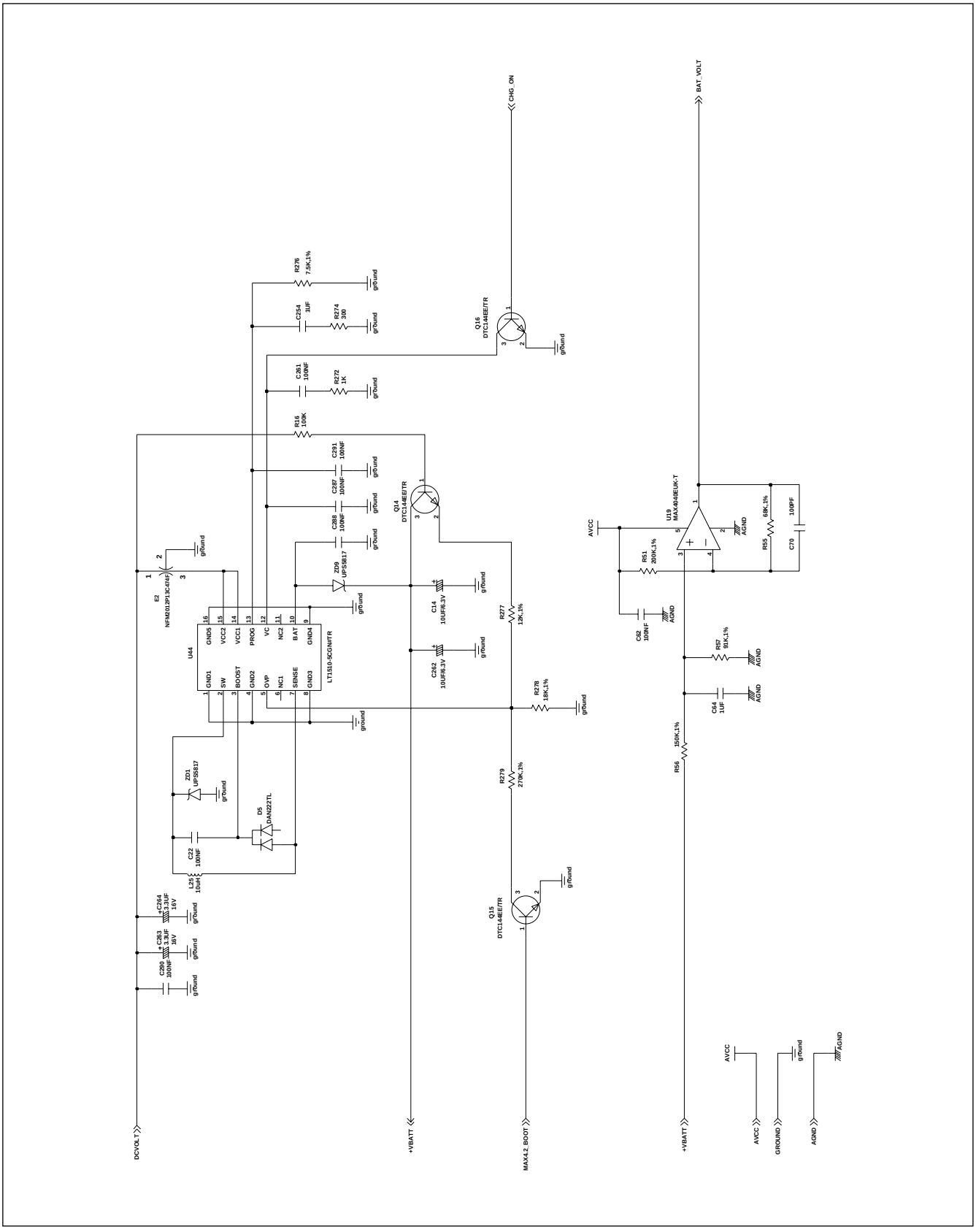
5-1 Power Management Schematic



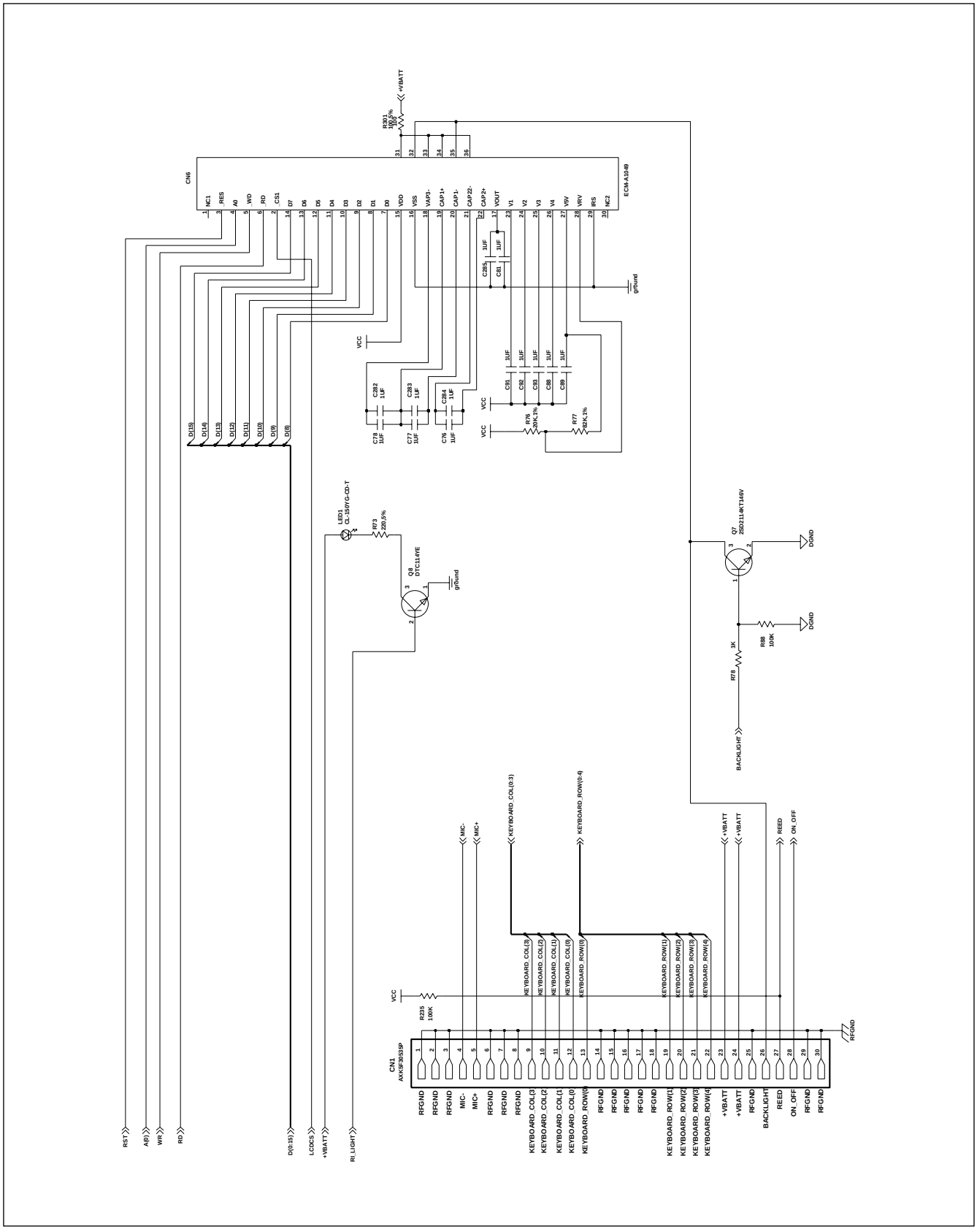
5-2 PSU Schematic



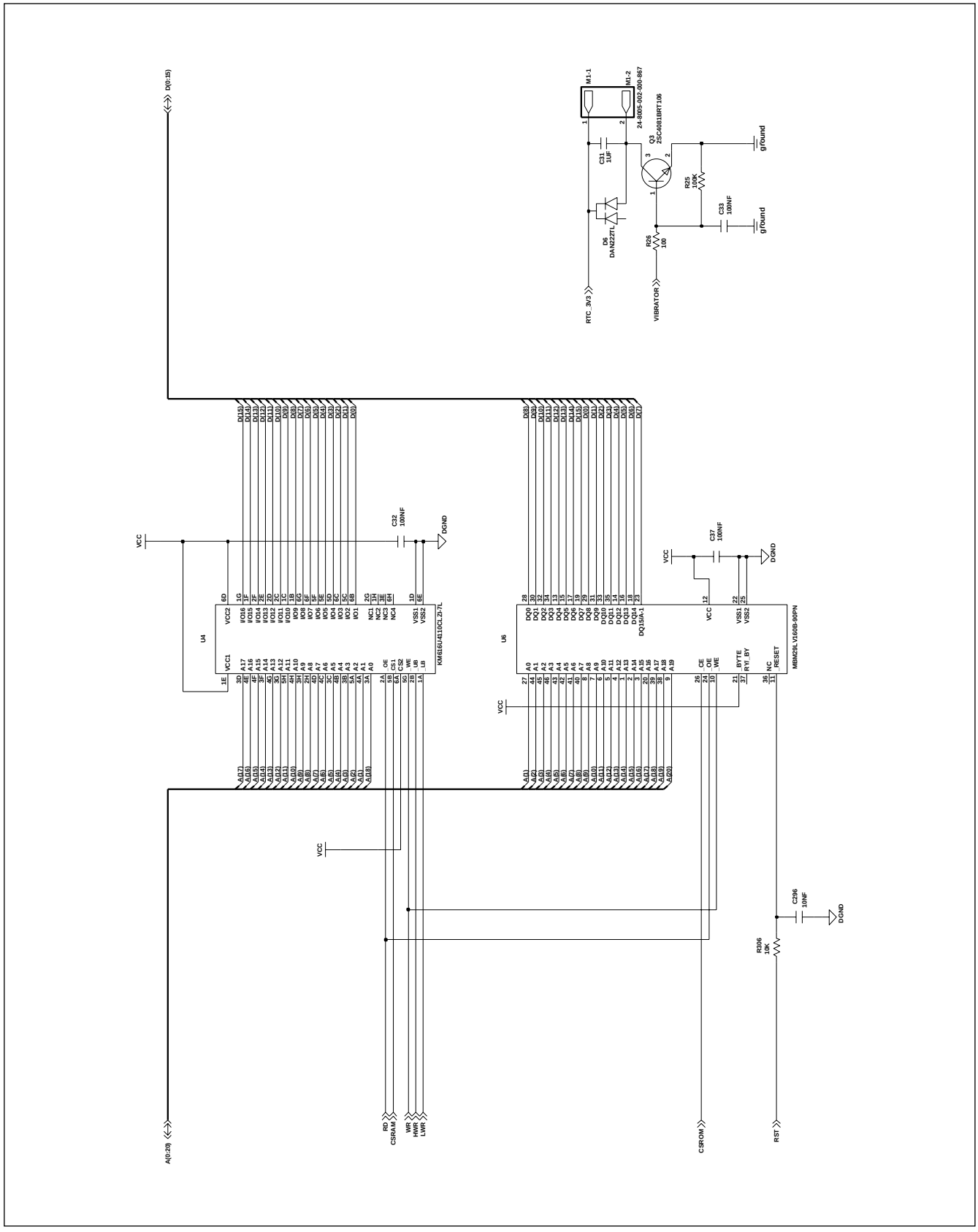
5-3 B.B Charger



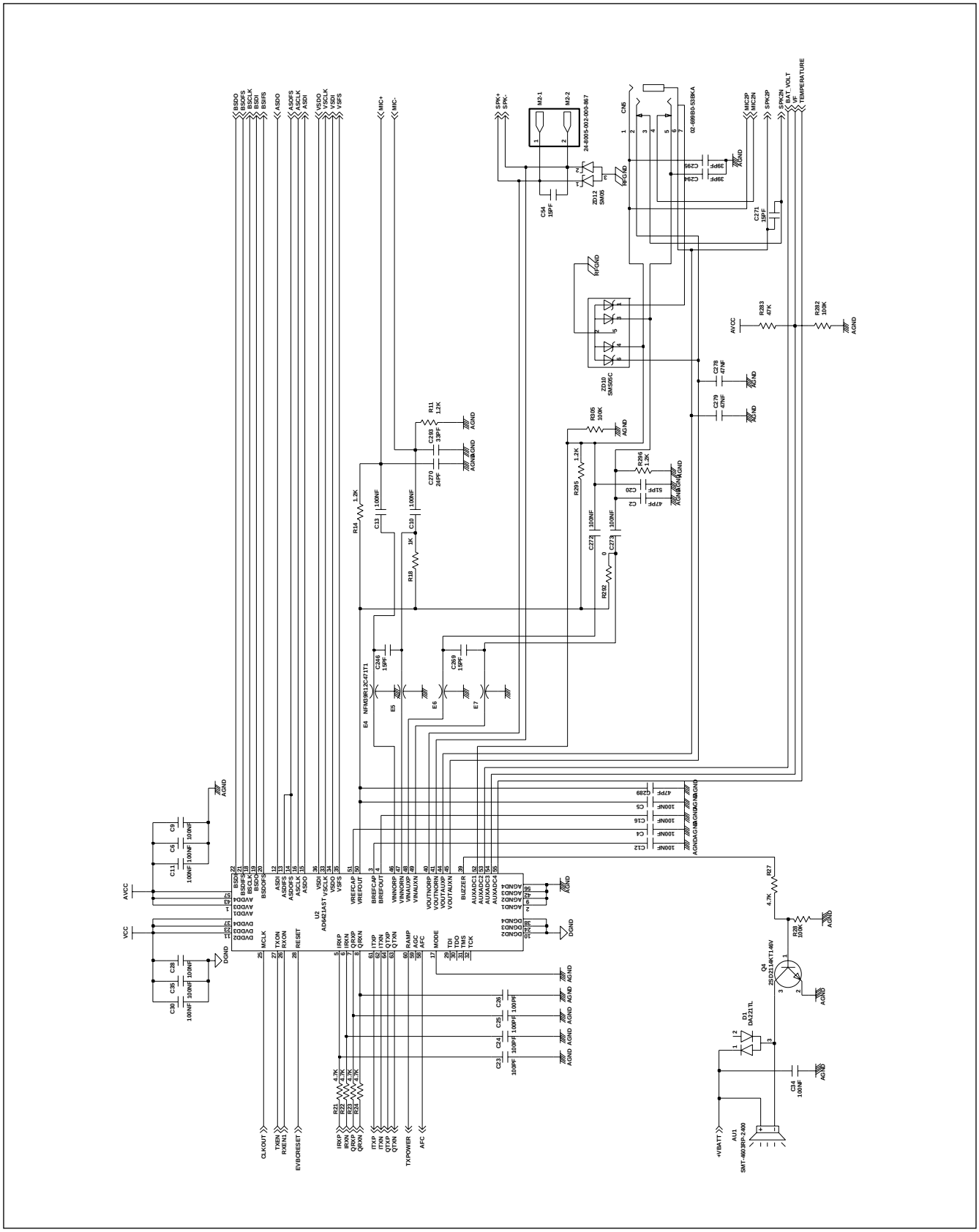
5-4 LCD Schematic

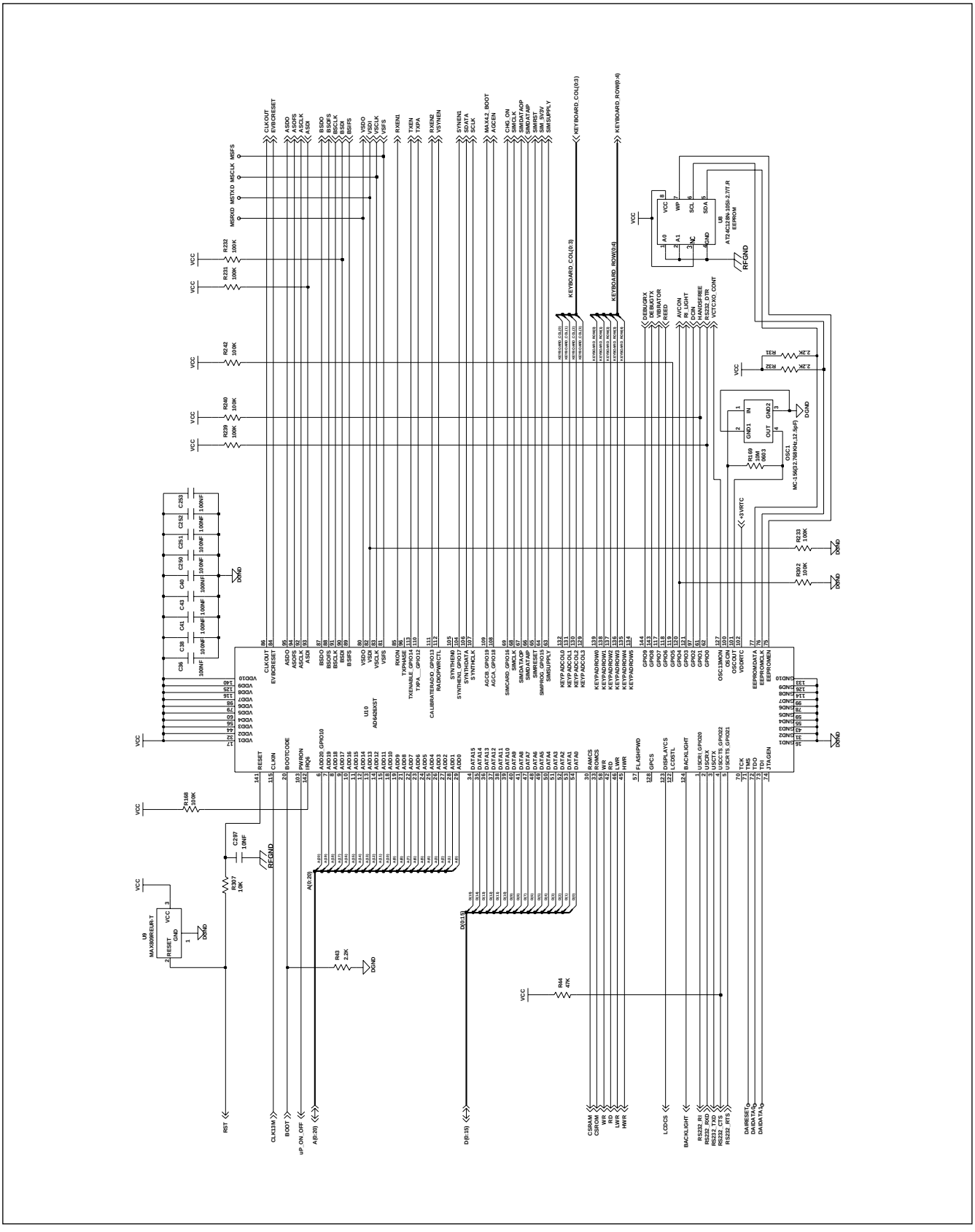


5-5 B.B Memory

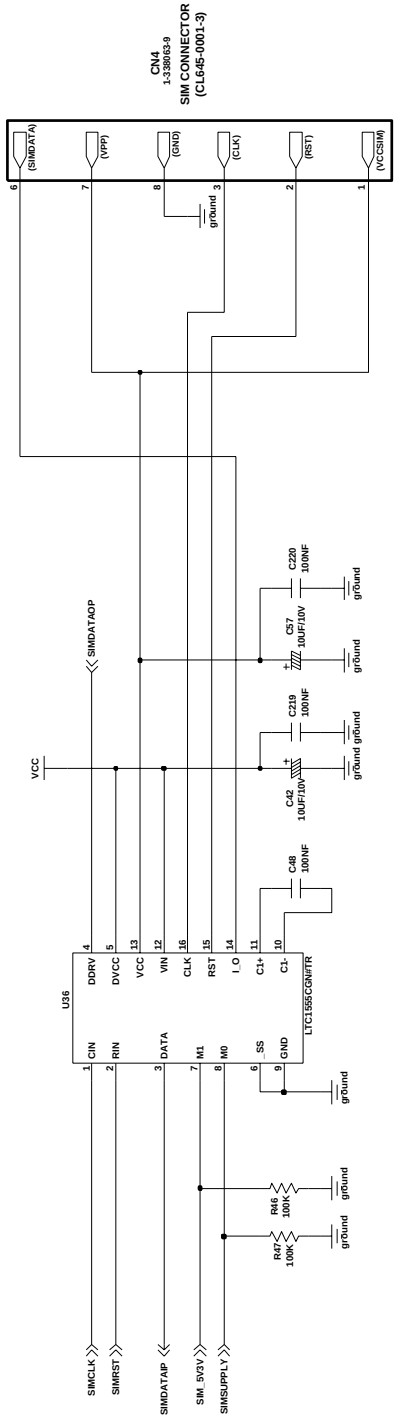

D(0:15)
M1-1
M1-2
24-9005-502-000-867
C31
1UF
Q3
2SC4081BRT106
R25
100K
C33
100NF
ground
D6
DAN222TL
R26
100
RTC_3V3
VIBRATOR
U4
KM616U4110CLZ-7L
C32
100NF
VCC
DGND
U6
MBM29LV160B-90PN
C27
100NF
C296
10NF
R306
10K
A(0:20)
RD
CSRAM
WR
HWR
LWR
CSROM
RST

5-6 EVBC

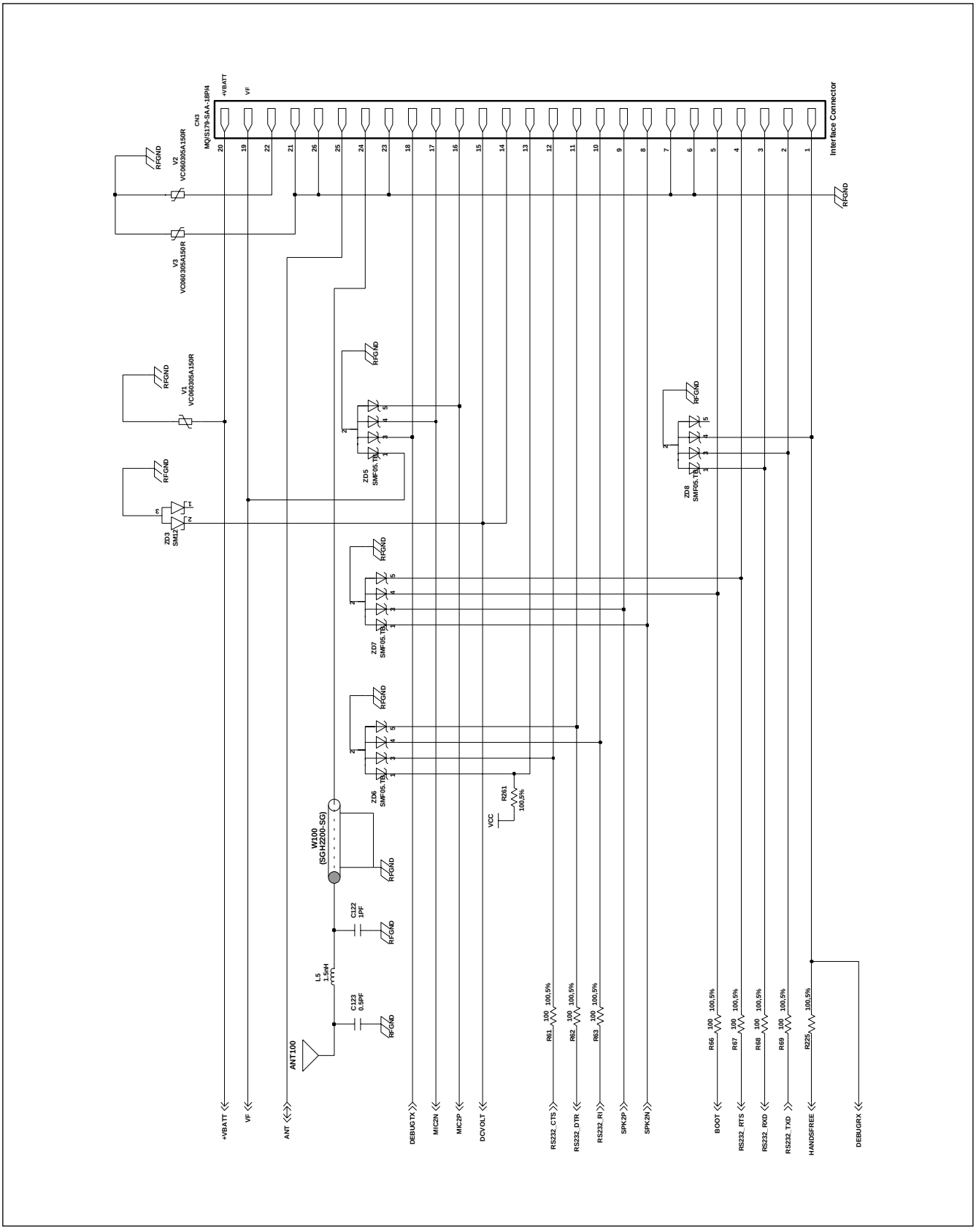




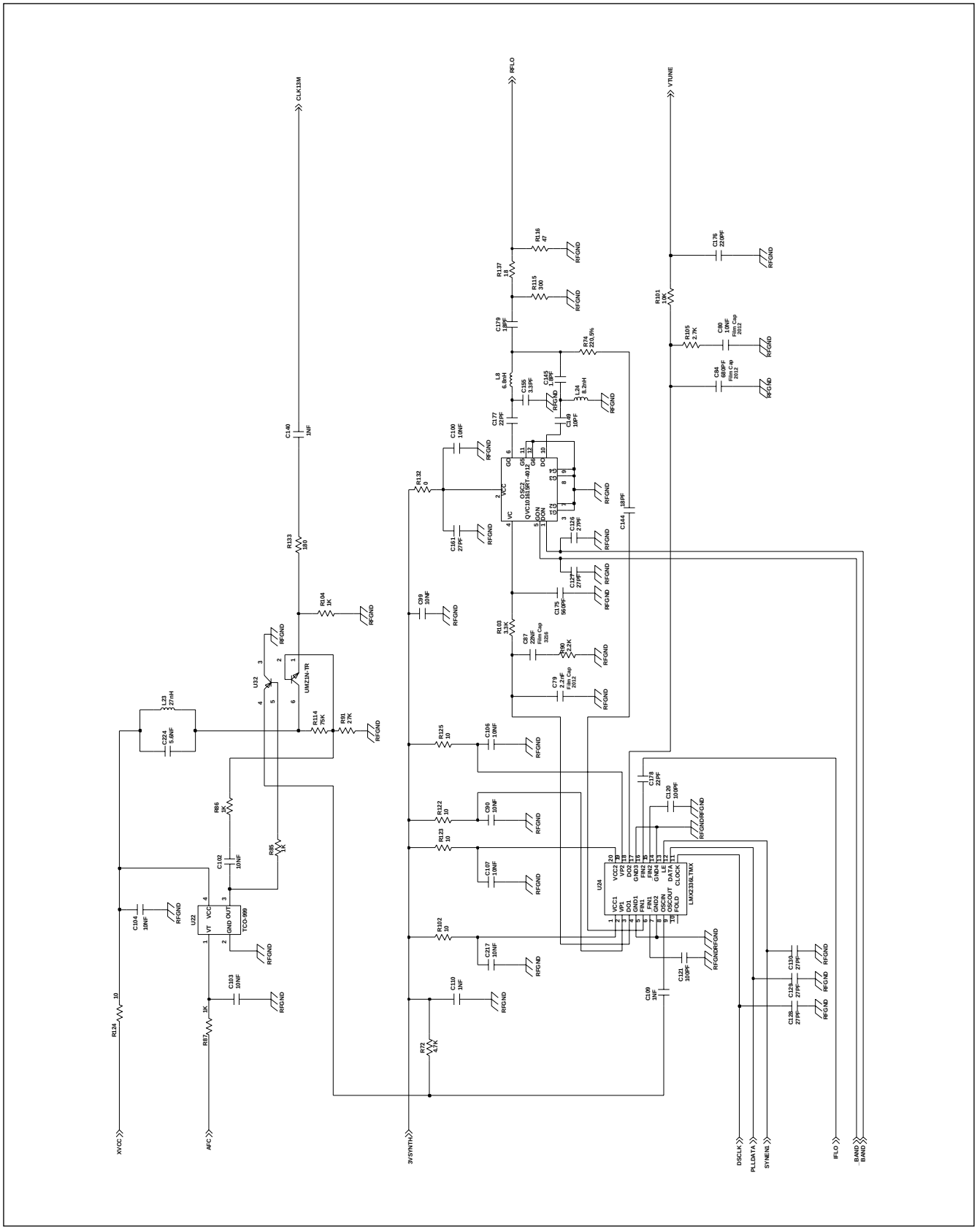
5-8 SIM Interface



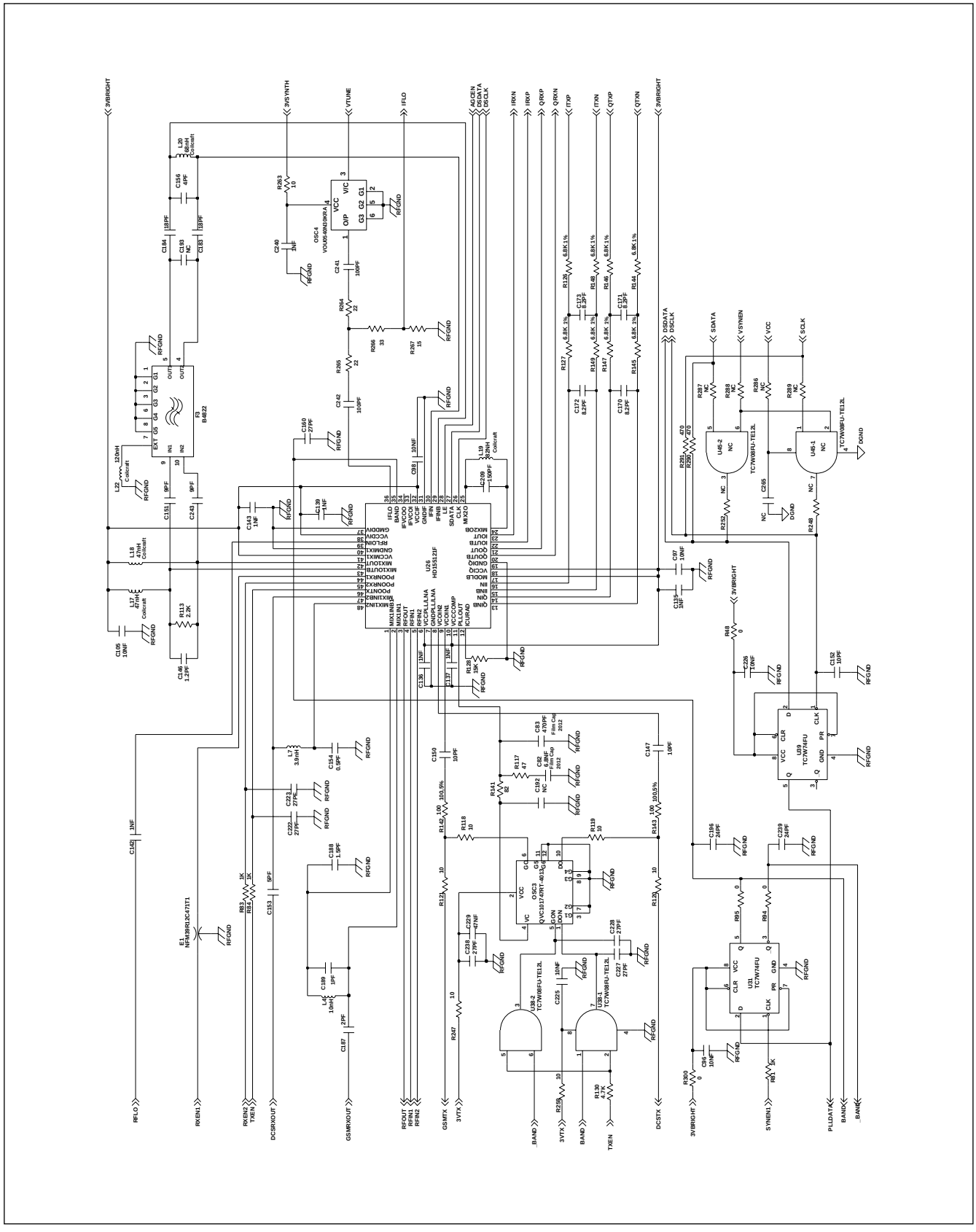
5-9 B.B Interface Connector



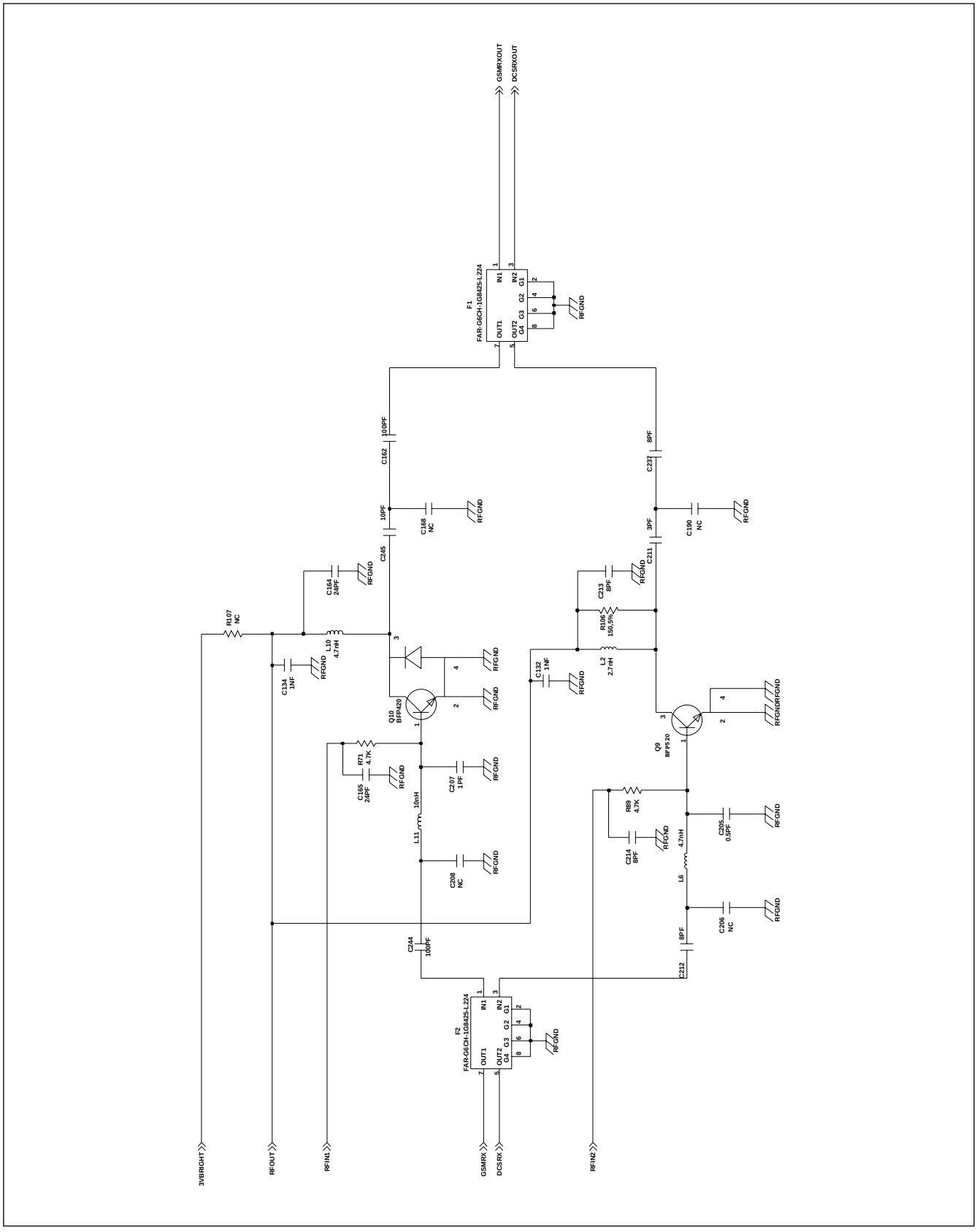
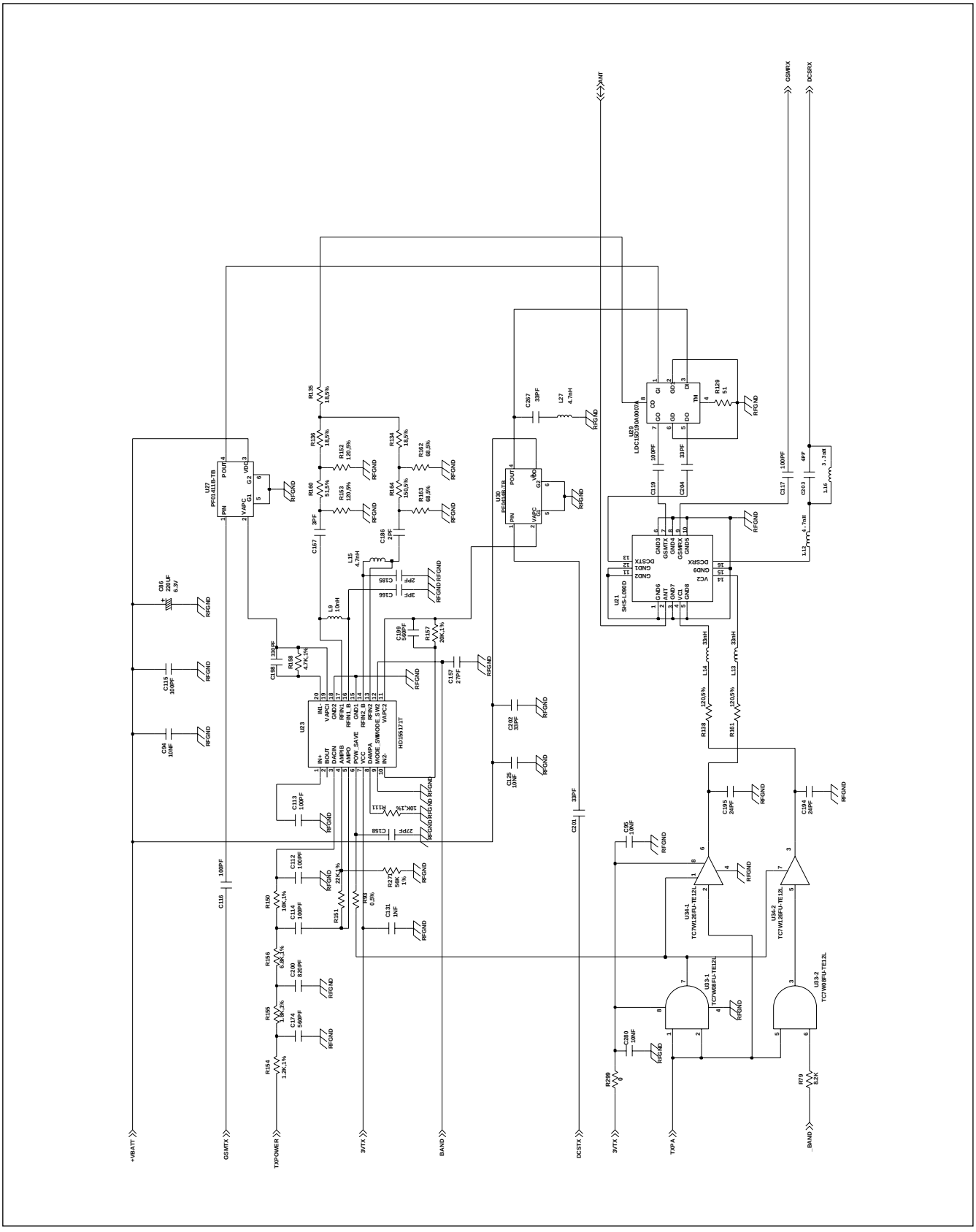
5-10 VCTXO & DUAL Synthesizer



5-11 BRIGHT IC & TXVCO



5-12 LNA


GSMRXOUT
DCSRXOUT
F1
FAR-G6CH-1G8425-L224
IN1
IN2
G1
G2
G3
G4
OUT1
OUT2
RFGND
C162
100PF
C168
NC
C245
10PF
C164
24PF
R107
NC
L10
4.7nH
C134
1NF
Q10
BFP420
R71
4.7K
C165
24PF
C207
1PF
L11
10nH
C208
NC
C244
100PF
F2
FAR-G6CH-1G8425-L224
C237
8PF
C190
NC
3PF
C211
C213
8PF
R105
150,5%
L2
2.7nH
C132
1NF
Q9
BFP520
R89
4.7K
C214
8PF
C205
0.5PF
L5
4.7nH
C206
NC
8PF
C212
RFGNDRFGND
3VBRGHT
RFOUT
RFIN1
GSMRX
DCSRX
RFIN2

5-13 RF Transmitter